<220>
<221> SITE
<222> (961)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (963)
<223> n equals a,t,g, or c

<400> 845
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cctggaaaag cgcctcctcc gccgctcccg ctcggggggac gtgctggcca agaaccctgt    60
ggtgcgctcc aagagctaca acacgcctct gctgaaccccc gtgcaggagc acaggcggag   120
ggcgcggcgg ccggcggtac cagcatccgc agcactctgt gtcggagatg acgtcctgcc   180
ccgagcctca gggcttctcc gacccgcccg gccagggccc caccggggac cttcaggtct   240
kccccggcgc cccactcarg gccctgcccc agcagactgt accccacgac ccagcccccct   300
gagcagggct tggatcccac ccgcagctcc ctgccccgct ccagcccgga gaacctggtg   360
gaccagatcc tggagtccgt ggactcggat tctgaaggga ttttcattga ctttggccgg   420
ggccggggct ctggcatgtc cgacttggag ggctctgggg gccggcagag tgtcgtgtga   480
ggcctcacag ctggccttga gtttttactg acacgtccct gtgtgcgggg gtgtccatgt   540
ggcgtgtgtg tgagtgagac tttttttactg cgtcccgtcc cgccagccct atcggcctcg   600
tcactggcct tggtcacttt gtatttctgt cttggttgga aataccatca gccttccttg   660
ctcggcccag gtctgtttca ggcatctgag tcggcgttta cccagggggcc gggccagaga   720
cgggggtcgg ccgctcgctc ccacgctcct cctgccccag ccctctggtg tccacacctg   780
cccacagaga atgtaaaccc agtgggctct gcccacgccg ggccccaaag tgaccagact   840
ccagcacacc tgtctcctcc tgcctggggt ggccatgggg atggaagggg gtggaataaa   900
acctgtcaac ctggctcatg tcttgcangt gcctgccctg ggggcgcccc tttcagggtg   960
ntnaccct                                                            968
```

<210> 846
<211> 990
<212> DNA
<213> Homo sapiens

<400> 846
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ttaagacacg cgtcccaggt gtggatgtgt gggtgcttaa gacagcagac tgctgctttg    60
ctgggccagg cctgggttta tttattacaa gcagttcagg aagcacagac atcacgttgt   120
tcacttgctt cactgatgaa tgtaataatt gttctcgttc atgcccttttg cccctggtgt   180
cggggctgtc cacactgggg accattggtg cccccatgat tattagctcc ctgaagcctg   240
gtgggtcgtc agggcttctg tccggtgttt aaagacccat cccagacaag cccaaaccac   300
ctcagtttga agagacatag agggacaggc agacggggcc tcagagggat ccagcctcat   360
ccagcctccc ggcaacctca ggagagcagg ccagatgggg cctcagaggg atccagcctc   420
atccagcctc ccggcaacct caggctggtt cccttccagt gccgactcca cagccctgct   480
ggttcccttc cagtgccgac tcccaggctg agtcgctttg cagcgtttgg gacgtacgca   540
gggcctgtgc tgtgggccag ccacttagtg cacttcctga gctcagaaac acgcagtggt   600
tcagcactga gtcatgcttg cttctctacg cactgatttg ttctattcca gttttcacgt   660
acatcgtttt ggtgacatct ctgcgttatc atttattttat atggagtgta ttttctccaa   720
aacttctcta cgagggaatg cacctgctca ttacagctgc tgtctgtgta ttcttcacgg   780
caatggatca aaccagactc acacagtctt agactaagct gaacactgga aaaataatac   840
atgcttaaag tctgctgtta ttctaaaatg aaagatatga attcaacaaa gttgatggat   900
aactttcttt gactgctcta cctgaattta gactaagcag taaatagttt aataaaagat   960
cactttaata taaaaaaaaa aaaaaaaaaa                                     990
```

<210> 847
<211> 968
<212> DNA
<213> Homo sapiens

<400> 847
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aaaatgtgca gaaaagggaa catgtgttgc tgtgacttta aaatgttttt tcctgatgaa    60
```

```
tatatcagaa agtaacatgg cattctcatt tcatgcaggt gcagactact gtactgttgt       120
tgcaggctga ctttttcaga gtgagggctc cttgtgggga gctgcgagct gccagcatca       180
gggcaaagcc atggtgactt tgaagccttc ctacttgact tgagtgagat gtggcgagga       240
ttctgggggc ttagagaggg cagcctggag aagccagagt taagctcaga acaagaggtg       300
caggaagagc cacagcaggg aagggaagag agatcccaga ggaggggcag agtgtggcag       360
gacaagggcc ctgccgtaca tgcccaatta cagggcctcg aaagagtcct gtattgttat       420
ttttcgtcac tacctccccg ggtcgggagt gggtaatttg cgcgcctgct gccttccttg       480
gatgtggtag ccgtttctca ggctccctct ccggaatcga accctgattc cccgtcaccc       540
gtggtcacca tggtaggcac ggcgactacc atcgaaagtt gatagggcag acgttcgaat       600
gggtcgtcgc cgccacgggg ggcgtgcgat cggcccgagg ttatctagag tcaccaaagc       660
cgccggcgcc cgccccccgg ccggggccgg agaggggctg accgggttgg ttttgatctg       720
ataaatgcac gcatcccccc cgcgaagggg gtcagcgccc gtcggcatgt attagctcta       780
gaattaccac agttatccaa gtaggagagg agcgagcgac caaaggaacc ataactgatt       840
taatgagcca ttcgcagttt cactgtaccg gccgtgcgta cttagacatg catggcttaa       900
tctttgagac aagcatatgc tactggcctc gtgccgaatt cgatatcaag cttatcgata       960
ccgtcgac                                                                968
```

```
<210> 848
<211> 818
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (595)
<223> n equals a,t,g, or c

<400> 848
gaattcggca cgagctgatg tccacagggt ggcgctcaat cacgttcagg aagcgcgcct        60
cggggactgc gatggcacag atcacgtgga tccacctcct atcggtggtc atctgcagcg       120
cacctcctcg caggttgcac aggcagcact ccgcagtcca ggcgtgggcc gcgcaccggg       180
aacacgtcca gccttcattg accagctcgg gacggatgcc atagcaactg gcatggacct       240
gcaggcagca cttgccgcag ggatcagggg gctggtcccg tcgtcgccga tgtaggagtt       300
ggcaggcagc ggctccgtgt tctcaccgcc akaggtgaag cacatctcag ggatgagcgg       360
tcgggtcttc tgacggcttt tggagggtaa tgtggccggg cagccctctc cgagggaggc       420
tatgggtgcc tccttctcag tctgtagggc ctggcagtag gggtagaaga gcgtgcagat       480
ggcgcagtag ggctccgtgc gcgcascgct gcgttgaact tcctctcggs ctggaagctg       540
gccgccctgt tcttccactg cagagacagc agcggcctca aggcgtccgg gtcantcaca       600
tcttcctccc cggagaaagg ggatkcctcc tcgtcacttg aggcctcctg cttcamcacc       660
gacagtgggg accgggtggg cggccggccc aggggatggc gccggctctt cttgatctcc       720
atcttcaatt tggaaaatgt ggamggtgcc tgccctctc cgrcccgggc tttggtctcc       780
atgcgacctg ccccactgct ggctgcaccg tcctctgg                               818
```

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<210> 849
<211> 1134
<212> DNA
<213> Homo sapiens

<400> 849
cggcacgagg aggaacccca acccagctag tcccctaggg gctggaggcc aggggcagac        60
tgagaagggg ggcatgggtg gtaggggagg gaggaaagac cacccaccaa aataaacagg       120
cagatccaaa catttataca ggaaacatct ggctgaacgg aagaggatct tggggakatg       180
agaagccccc cacatttcat tttttttttc ctaaaatgtc ctggactggg ttggggaggt       240
cagccacctg gggtttaagg ggcaatcccc tccccacacc gacgtgctga ggagcagatg       300
tgtgtgagac agacacaagg ggcaaagata aggacaagag ggtgccttct ccttggaatc       360
tgttatgagg gctgaggggtg tccccgtcca gttcctggac tctgggggat cttgggtgag       420
atggggccg gaatgggctg gggcagggt gaggctgggc gctcagccta agaagccatc       480
ggggtcatca tcctcaaagt ggccttgctg aagcaccttg atgtggtgtt cgtagatttt       540
cagggctggc ccgaggcgga tggacaggcc ggtgagcaca tctgtgcgct gcatgagcag       600
caaagatttg ccatcaattt cctgctcttg gaaagctgtc gcctgctccg ggaatccagc       660
ctcagtaaaa tattcgacga catccatcac ggtccactcg acgggatccg atggcttctc       720
```

```
tttgcgcccg ggaggacagc caaaggggga cccgtcggcc ccaggtaggg ctggtttgcc    780
tgggggcaaa ggcacggggg acggggagtc tggcccggtg gcaacagaag ctgttccccc    840
ttccttgttc atggctgcca tggagaacac ctggcgggtg ccgctgcccg gggctggccc    900
ccgcccttca tcctggccct ggagggcaga ttgcttgagc ccaggagttt gagaccagcc    960
tgggcaacac agtgagaccc ctgcttctac acacacacca aattagccag gtgtggtggt   1020
gcacatctgt agtcccagct acttgggagg ctgaggtgag agaatcattt gagccctgaa   1080
gctcaagacc tcgtgccgaa ttcgatatca agcttatcga taccgtcgac ctcg         1134
```

<210> 850
<211> 1643
<212> DNA
<213> Homo sapiens

<400> 850
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ggcacgagcg cacattcatg tagcgcatgt gtgtgttcgt gcatatggtg tgtgcatggg     60
tgttcgtatc tgtggggtac aggcatcatg cacgtgtgtt catctgtgtg gggtgtgggt    120
atacctggac tgtggcctga ggctccccta caggacactg ctcctgccgc ctccccaggg    180
gataacagga ccctgctcct cttgctaaag ccagtttggg agcaccccca cccaggcacc    240
ccacgccagc caggctcgcc tctgaccaga tggctgaagg agcaggtaga gcaggaagtg    300
ggagccagtg acccaggttc ccctggtggc caggcttggt ggcccatgtc catggagtcc    360
cccacctgcc aacgacctcc ggccatgcct cctgggtacc aggccaccca tgggcggggg    420
tgggggtaac tcccagctga ctcgctgcct agctggcacc aatgaggtct ccacctcagc    480
ctgggctgag tgtctagtgc tgactccttc ctacaggcag gtgagcttgg gaggcagggg    540
ccctgtggac ttgggaagcg ggctcagggt ctggaggcca gaggtcttgt ccccaggccc    600
agcatcccat cagcaagagc ccaggaggct ctcagggcag tcctcctcta gcaatctcag    660
gggcagcgtc ctcccaggag tcacatccag atcaccatac gcacccgctg gcccctagca    720
tgttccataa gtggagaggg gttggcctgt ggaggcaggg gcggccagaa gatgtgccgg    780
aaccccatct agaggctgac acgtaaaccc agatggcaca ggggagcctg agcatgaagt    840
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gcccactgga acgcctcaac aggctgctcc ctgtggttgg tgacaccacc actcgggtcg    960
gcttggctga ggccagcgga gcatctcccc tctgggtcca ttcacatcca tcttccccgg   1020
acaaatgaac acccccaaa cactcacttc ccactttgac cccagaccaa acacacagcc   1080
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tgggctatac ctgtgtggct gcacaactgt gccaggacag ccttaccttt gccggggggct   1200
tcgtgccctc ccagctgcgt gtgtccatgg acgggggggac ctggtagatg tcatgcccca   1260
tcccggcaga aggtggcacc tggtaaatat cctgggcagg gcctccaggc cctggggggca   1320
cctggtacag gtctgtggcc gggctgggaa acgggtgatg gggtgtctgc ttcgagaagg   1380
tggatgtctg cttggctggg ggagactgga actgagggct gggacccggg acttggtaga   1440
ggccttgctg agccttgctg ggagtgggca ccaggtagac gctgtctggc tggggctggt   1500
aggtgttggg gagcatgggc gtgtactggg aggccggagg cgctgggggca tggaggccag   1560
gctgaggctg gccgggggtg gcgggagggc cggggccagg ccctcgtgcc gaattcgata   1620
tcaagcttat cgataccgtc gac                                           1643
```

<210> 851
<211> 2298
<212> DNA
<213> Homo sapiens

<400> 851
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ctagagcaaa tttctctttc tagaagggga gggtcacagg gtcacagatt caccaaagct     60
gaaagggctg aggagctcat ggtagcctgg gttgacctac tctggagcac ggtgtcttcc    120
ttctaaactg agtgactgta gtactatctg tgcctctgat ggtaataaaa ctgacaagat    180
gtctaatttt tttttaagta ggaccaaagg aaaacaagat ttagatagtc tgactttgct    240
tttgaacaac agacattgca agtcaaaatt gttgtcaaat ttacatatgt taaatgatga    300
actttaaaaa tgtgtccagg tgttagatga gttcattaga ctcttttaat gctaatggct    360
agtacgttta aacaaaacag cagttctctg ctgcaatatt cccattgacc acttaaatga    420
ccataagtgg tcatttaaga acatgttagg gttagccctg atctgaatat aaaagtgaga    480
aaagggctac agtgcatttc ttggtaactt aaactgagtc ttgaagttat aatgatccat    540
tcgagttctg tgatccttat tgttcttaat tgtgtttctc tacgtattgt tacagatgag    600
ccatacgttt ctttgtatca atgtagacat gacttcagat acctctgagg acctacccag    660
cagtctagga ccctgggcca agtgctggga ctatggtact aaatccagta gatgggctgt    720
```
```
                              503
```

```
gtagcaactc tcccagggaa cacactaggg tacttaggga ggtgctttgt ggagcatgtt    780
gaagctttga gatctgagca ggaggcagtg atgtccctgg tctattcagg gaaagatttc    840
agtgtgaaat ggtaaacatc caattgacag gatttagatt ttgcttagtt tttctgcttt    900
ttaatgtttc tatcccccat ctcagtgttt tctttatcca tcccagtgat gccttatttg    960
aaactgggct taaactgcaa aaagaatgaa gttggattta ggaagctgtt agatcattga   1020
gtggtgttga gagtgaagtt tcactagcag ggaagtttcc ttgagcctaa aataaaaaga   1080
aaaaattaaa aagaatcagt ttttttaatt aaaaaaatag aaagctgtta ggctcctaat   1140
tcgtggggtt tttttttgta aaaacagttt agataatcct gaatgcaatc attaacttgg   1200
ttgctaatta caagaatgaa aattataatg gaaaaggaca aaataatata ccagctggtt   1260
tgttattata gtccgtgtat taaaatacta ttgaaatacg ttaaaggtaa atttttaagg   1320
tttaaaaaaa atttagtaac ttacagggat ggagaattta gatgtcagag gtggggagat   1380
ttatttttat aaggtaattt ttatcctgat aaggacttaa aaaaaagttt tgcaactgaa   1440
attttaaagt aaacatgtta agtacagtta aaaagtaagc attgtagtaa atagtggatt   1500
ctctggtgtg tattttttat ctcagtgttg aaaattggaa aagaatggac tgaagtctaa   1560
aaactggaat aatgaaggac actaaatgcc tttattgtag atactatgtt tgtaagtcta   1620
tagctaagca acttaagcca aaaaggtctt tcaactgaag ctttaatcaa cttattttgg   1680
agatgttctc ttcccttatc tcatgcgtca tccctaaaat aataagatac atgggatcaa   1740
atagcccttg cctttcaac acaaatcagt tggaaaatta tggtttgagt cctgttgctg   1800
ccatggcttc tgtttctcag aaatgagtgt gtatgaacat accaatctat gtaataggct   1860
acctttttt gtcttctttg gaactttgta cacaaaccaa gacaatatca gggtgacagg   1920
tgaatgaact taaattctca gtcttgtcta ttcaccaaaa aagtatactg cctgtttttt   1980
ctttaattat tcaaggttga tgactttag gaacatgttt tatactgtat tttttaatta   2040
aagcaagtgc cttgatgtaa ttccatgtaa atcattgctt aaccctctta tgggatgagg   2100
atgagttatt aatgtattgc agcctactgg aaaggagggg gagttggtta atagcagata   2160
cttttcttct agaagcttat gttttatgct gtttattatg taagatcctg tatgtgtgtt   2220
gagatttaga ggtttcattt gttttgtctg ctaataaatt gttactctaa taataaaaaa   2280
aaaaaaaaaa aactcgag                                                  2298
```

<210> 852
<211> 1952
<212> DNA
<213> Homo sapiens

<400> 852

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ggtagaactc aagttgctgt gaactttct catccaaaag actcatttgt gtggatgcgt     60
gaccatggga aaaagaaaaa aaaaagatc cattttttag gttctttcg gtctccagct    120
gacaacccaa ctggacaatg atctgtctgg tgcaggagaa ggcaaaagtt tctacaagtc    180
tacatgacct tgctgatact tgttctaata gaaacccagt ctgctgtgtc ttcaacatac    240
tggtattttc attacaaagt atggtaaatt tttgagttgt ttgtttctgt tttgtaaaga    300
gaatccttat tggacaccag tgaaggtgtc tctgttttaa tgatcagggt ttttattcca    360
tcttttgcat ttcttctatt tctgaaggtt tgtctcttgg catctttttt tagtttctta    420
ccataagagt ttgacccgaa actgctcact tcacattgga tgacaccatg ttcttcctct    480
ttgaaaagaa aagggggaatg tgtcccacta gtgaaaggaa aacttttcaa cactatccct    540
gctttaatct cagcaaactc agactattct gcttagcctt cattagtcat ctgggtgtga    600
gtgtgtcttg ttctgttttt ctttttaata aaactttaa accatatatt tagcctgtga    660
ccagggggggc caaaccctaa gatttctggt aaacctgaag ggtggccctc ctcagacaat    720
ttatctccca gcaatgaccc tactacactc gcgtactgtg aatttgggag gaggtaaagt    780
tgacttctcc tcgtgggcag ttttccaatc accttgtgag tagacacctg ccaatattgt    840
ttgaaacctt tttttaatat gacatcctct cttgtcattc tcttctcccc tttcccacag    900
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tggtgaacat tgacttcaag tagcatagcc cttgtgtgac tcacaactcc gtgtccttcc   1020
taaagtttcg ggaagcaggg ttgtctaata tgcacatttc ttattttggt catattttta   1080
ctttagtgtc actcaccttt tacaaagtga ctttgtactc atttagggct ctatcggaaa   1140
tgcttccatt ttgcctttc tacagttagg ccaattttga aatatataaa ttctatgcaa   1200
catttatgtt gagttaccaa tggaagccaa aagttctctt cccaaactgc caagaatgat   1260
acaggccata attgaaatgg gaatacckt taagtttcat tagggtggg gtggagtgg   1320
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gatgcttaaa cttcaaaatt ctctgtattc aaatttgatt gtggcgaatc tacttcaaaa   1440
aggaaaaata atccaacttt gtggatatta aatggaaggt ttgctgtttt gatctagttg   1500
tttccagtgg agcagtttta tgaaatatgt tctataagat gtacattttt tcattgtaac   1560
atagaaattg taaataattg attaaagtgc tgcattttga tgaattttt ctagccattt   1620
```

504

```
ttaaagagaa aactaggaat tgagtatttt gtgtacggta tgtttccatc ctccctcccc    1680
ttcctcctcc cctcctctct ctctcttcct acctatttaa ttttcatttg tcatgaggtt    1740
tttggatttg ccaatgatct gctggacatc atgccccatg tcatagagaa taaagctgat    1800
gattgtacca gtcttaaatt attcatgatt caataaaatt gatgcttatt tattcaaaaa    1860
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1920
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa                                  1952
```

<210> 853
<211> 1076
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> n equals a,t,g, or c

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<400> 853
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ccagcatcaa catgctgcca cctgcccacc accaggcctt tgtccgacat cgcctggagg     180
aggccttccg tgtggccctt gttgggcacc gacatcccct gcctgtcctg gcctatgtcc     240
gcctcacaca ccggagatct gggaggttcc tgtcccagga tgaccttgtg cagtccattg     300
gtgtgagtgc agcactaggg gcagccggcg tggtgctctg gggggacctg agcctctcca     360
gctctgagga ggagtgctgg catctccatg actacctggt ggacaccttg ggcccctatg     420
tgatcaatgt gaccagggca gcgatggcct gcagtcacca gcggtgccat ggccacgggc     480
gctgtgcccg gcgagatcca ggacagatgg aagcctttct acacctgtgg ccagacggca     540
gccttggaga ttggaagtcc ttcagctgcc actgttactg gggctgggct ggccccacct     600
gccaggagcc caggcctggg cctaaagaag cagtataaag ccagggcccc tgccactgcc     660
tcttcttttc cctgctgcca cttttccagt cctggaacta ctctgtccca ctcttgctct     720
attcagttta cagtcaaccc tcccaagcac acaccccgct tcccttggaa tccctgaggg      780
gtagaagggg ccagaaaaaa cgcttataaa accagaggcc ctctgagatc atgtgagtcc     840
tccatggcaa ggaagcagtt ccagggagag tcaggttcca gctagttagg gctgccagcc     900
tagggctttg tgcctacacc tcactaagcc catggagagg tcacagatgg gccgtgcacg     960
ggcagatggg ccccaaaaaa tcttggcgaa ggtcggtaaa gtgctaagct gttgtctgca    1020
ctctttcatc ataaagtcac tttttttccac taaaaaaaaa aaaaaaaaaa ctcgag        1076
```

<210> 854
<211> 561
<212> DNA
<213> Homo sapiens

```
<400> 854
ggccattatg gccggggtga ttgccatttg tagaggggaa ggaatcaagg gactttaagc      60
tagatcaaaa tctggggaca aattctcctg ctaactgcaa gttaaaatag gcccttctta     120
ctgaatttcc ctgtttgttt ctctgcagac aatgctttag ccctactctt gggcccccaa     180
gttagcagag taatcaaagc ttcctaccgt ttggcctact attccagact agtccctcga     240
ggggttccct tccaaaatat gcagggctca ggctcccaat tccgggcctg tctgctttgc     300
ttgtgtttct cctgtccctg ttctcccgga gggcccaggt ggaactcacg acagggaggg     360
agacgcttcc caaaaacctg cagggctatt tcccagaatt tggttttcaa gtacaaaact     420
ttttgtcctg taagatatat gcagcctcac agaagcagcc tctgcctcca ctttaccagc     480
tacgttttta tcttaagcac atggggctcc cttagaactt actccactga tttaaaaaaa     540
aaaaaaaaaa aaaaaaaaaa a                                               561
```

<210> 855
<211> 1629
<212> DNA
<213> Homo sapiens

```
<400> 855
cccacgcgtc cgttccagag ctcttggaat tctgacatct catcaaagtg cttttttgaa      60
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taatgaacac ccctggacta agcctgtttc ttctgagaat ttcacttctc cttatgtgtg    240
gatgttagat gctgaagatt tggctgatat tgaagatact gtggaatgga gacatagaaa    300
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aggaaagcac caatcgatat ttgtttcctt tagggatact ttgttctcac cactgtccct   1500
atgtcatcaa atttgggaga gatttttttaa aataccacaa tcatttgaag aaatgtataa   1560
ataaaatcta ctttgaggac tttaccaagt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1620
aaaaaaaaa                                                          1629


<210> 856
<211> 1018
<212> DNA
<213> Homo sapiens

<400> 856
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tccctacagt aaagaaccta gctctgagca gtgaaattgt aatggcactt taaaggaagt    120
aagccgttaa ctgttctcta gtggagcgat ctccaactgt tttggcacta gggacgggtt    180
ttgtggaaga aaattttttcc acaggactgg gggtttaggg ggatggtttc aggatgattc    240
aagtacatta catttatcat tagattctca taaggagcat gcaacctaga tctcttgcac    300
gtgcggttca cagcaggatt cgagctcctt tgagaatcta atgccatggc tgatctaaca    360
ggaaactgag ctcaggcagt aatgcttggc accgcccccc accttctatg cagcccggtc    420
gtggcctggg gactggggac ccctgctcta gtcagtaata aggtacttgt gccagaatat    480
aaatcaacac attgcttcct ttatcaaaga agtcttgtta tttaaaaaaa gtcaactgag    540
ccagtatgat tagtgatgta attgatttttc attctggcac aagcctcttt cattctggac    600
agctcacaaa tagttaatgg accatgcttt gaatagcctt cctctaagca acatttataa    660
atactgatat tttagaactg tttacatttc ttctgtttat ttttgaattt tcagtttgat    720
atcttgtcct tattcattgt tgtataaaca actgtacttt aatttcaagt agtattaaaa    780
gtatttcact tcagtttggg gggattatta tcaatttata attttataaa agtattttaa    840
agaataattg taaattttcc ataaattaca acttcctgcc atcttttatt aaataataat    900
cttgcttaag gcatatagac agacattatt atgagtattc cagtaaaaaa aatctacatc    960
aacttgacca ttctggctaa aaattaaaaa gcactttttt aaaaaaaaaa aaaaaaaa   1018


<210> 857
<211> 892
<212> DNA
<213> Homo sapiens

<400> 857
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cttcaagtgg ccttaggaag ccgctggtaa ctgaacaact ttctctaaaa agccaagctc    120
atttttaact agagaatctg ggaaatactg tgagtttttt ctctttcctt ttaaaggtac    180
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506

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aattattata aattcctaac tgctcctaaa atcatataga acatttccag agccaaagaa    240
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aatgttttcc agattgtata agcaaaggct attattgctg ctgtggtata gtcactttgg    360
tggtggtggt agcaggctag agagaatctc ctttgccctg aagtctagaa tgtaaatttg    420
taccaccaaa cacaatagcc aatattataa acaggaagta agaaaaaaac ctcatctcac    480
ttgcaaaaga tcagcttatt ttcaattgtg gaaattaatt tgttatagat aacagtagat    540
ttgagtgact ttatttactt ttcctcttca gtataaaaaa taatattagt ataatctcat    600
tacatcaata tattgaatag ttaagttttt tcctctttta atatttaata tttgccctac    660
tgggcatgag ttggccatta ttgaagccag gtggtgagta cctaagaatt cattctacta    720
tttttctatt ttcatatacc tttggaattt actatcataa aattattttt aaggtatata    780
tttaaaatc ttctctgtta gctagtcctt ctcttgaacc acattcttca aaagttctcc    840
cacagctaag ttataaagag cggaccactt ttggcagaaa aaaaaaaaaa aa          892
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<210> 858
<211> 651
<212> DNA
<213> Homo sapiens

<400> 858
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tgatggttcc aggagggcca gctcccttat tgctttgctt tctcttcctc ctcttctggt    180
accttgggga actgatcaca aagagccttt tgagggtgat ggaaagctac ccctccattc    240
ctcaggcagt tttccaaaga tgacacttgg ctaaatgctc agggtatttta cagtcatagg    300
agataaacta tcaacttgtt actgttaaaa aaatcttgag atctgggatc ttgatgcctg    360
aaaatcccaa gattggtact tggcaaactg aaagaaatct agaaaccct agagatcagg    420
catctgtggc cagctaactg gtcatacaaa tggattgttg tggtgaactt gtatagtatt    480
aatcctgaga tgctgtcccc ctccaccccc acccccacaa aaaaataaa taaagtagta    540
ttaagttagc ctcatacaaa tgctggcacc atgctcctgg acttctcagc ctccataact    600
gtgagccaaa taaacttcct ttctttataa attaaaaaaa aaaaaaaaa a            651
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<210> 859
<211> 1270
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (553)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1070)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1208)
<223> n equals a,t,g, or c

<400> 859
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gcgtccggct gaatgttttt ttcattttcc tgagagatgc aaatgttcat tcattcatct    120
cattatacaa cacagtacat aaatgtagct tcagagcgta ttaagtgctt ttatacacaa    180
gtgctggctg tgtggaccag gtggtagctc atttaggccc caaattcatt aagggcaggg    240
tctgactctt aggcttctta atatttggtt tggtgcatgg tcaagagctg gacccacatg    300
ttgcatagca gcagggctga tatgtttaaa gacgctgggc tttttctgct ctggggccct    360
ttcccggggg ttccggtgag tccctcccca ggtgggtctg ccccacccg tgtgggcggg    420
attagctccc agaggctggc caggccccac ctgggggarg cttgagggca gggccccaag    480
gctgagattc aggcttgggg gaacagagca ggaaagagac ccggtaccga aagtgagcgg    540
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507

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ggcaggcacc tantcacatg ggtaatgggc aggggtcggt cactggcttt ggctccaggg    600
ccaragcagt ctgacttagt gttgagctcc aagcatggaa cactggagtg gttcattttg    660
accagcaagc ctctaaatgg gtgccttgat tacccaccgc aaggagaggg cagttgcctt    720
tttatgacat gttaattcca gccaggtgag tcaccaggta gctctcatcc tcctgccagg    780
ctcccctgcc tgtcggtttg gcattgtcag ataatgtgat cattcattga agtgacattt    840
gagttccaaa ccagtttct cctttaacca tttcaccctc aggagtgatt ctcctttgtt    900
tggcattgtc agggaatgtg atgatccatt caaatgactt ttgagttcca aatagtgttt    960
ctactttaac ttcctaaatg aaaaaaaaaa aaaaaaaaa gggcggccgc tctagaggat   1020
ccaagcttac gtacgcgtgc atgcgacgtc atagctcttc tatagtgtcn cctaaattca   1080
attcactggc cgtcgtttta caacgtcgtg actgggaaaa cctggcgtta cccaacttaa   1140
tcgccttgca gcacatcccc ctttcgccag ctggggttat aacgaaaagg ccgcacgatc   1200
gcccttcnca acagtttgcg caacctgaat ggcgaatggg accgccctgt aacggggcat   1260
taaacgcggc                                                          1270


<210> 860
<211> 3145
<212> DNA
<213> Homo sapiens


<400> 860
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aaaatgaaga aaaactaaga cgcagtcttc caaacctgtc ccgaacatct aatacacaag    120
ttgactcagt gaaaagcagc agaagtgact caaattttca agtgccaaac ggaggaatac    180
ctcgtatgca acctcaggct tcagccatac cttctccagg caaattccgt tcccctgcag    240
caccatctcc tttggctctt cggcaaccag tgaaagcatt tagtaaccat ggctctggtt    300
ctcctggtag ccaagaaata acacagctca cacaaaccac ctcytcacct gggcctccta    360
tggttcagag cacagtctca gcaaatcctc ccagcaatat caacagcgct actctaacca    420
gacctgcagg gacaactgca atgagaagtg gcttgcccag acccagtgcc ccttctgctg    480
ggggcatacc agtgyctcgc agcaaacttg cacagcctgt tcgcagatcc ttgccagctc    540
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gatgccaaag agaaatgccc atttgtaaat gagaaaaatg cccatttgtg cacaagaaaa    960
tggtgaattc aggctatcca aaacttcaca ttcaacctaa tttactgtat aaatagtatc   1020
aataaatatt tgtgttaatg agaactaata ttctgactaa ttatctaaag tgtttcacta   1080
gtacaccagg aaactacaga ttgagattag ggggtgggag gaaagaaacc tgggctagag   1140
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tgattgccaa aagggcttaa tatcagttgt acaatctttc tgaactttat agttcctggc   1380
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tctttattct tgatacaaca ccacctcggt gcttgcaacc tggaacaaaa ccataccatg   1560
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tattgttgct attacatggc ataacggtct attatgtggt aggaaaatat agcctgctaa   1680
atcctactta agttgatcca ctttaaactg agtaactgta taaacatct attgaaaatt   1740
cttttccttt tgacttagat tctgccttac atcaattttt gcatttttgg taaaaaaaaa   1800
accctactac gtatggactct aacctgatac ttgctctcta atggctctta atatatcctt   1860
gaaatcggct atttcaattt tatcagactt ttaccagagt aaaacttgct tctgtagcag   1920
gcctctcatt ttttattatg aggtctgttt ttaaatactt aatttgaaca gctctaagat   1980
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ttctggacag cattaaggtt gataggttga tgataaaaac ttaaaaccag gacctccatt   2160
ctgtcatgac tgacaccatg gtagtctgtc agcttgacca gtggagagtc attcatttag   2220
cacaagcagc tggagattta aactgccagt actatgtatt tggtgtataa tgcaaggaag   2280
aaactttatc cttgaatttg agggtgatgg ggtgggtcag gaaaggatgg cgccagaatt   2340
ctacatgata atgaactaaa aaatgttgct tttcagagga agataaagca tcttcttttg   2400
ggaggggggt atctcatgtc taagtaagta aaagaaagaa gtagctactg tctctttttaa   2460
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508

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gttagataat cagtttcaaa aggagtattc aggttattta actttgtttt taaatggctg      2640
catcagaaaa aaatgtctat ttttttttat taaaatattt catcacttgt taaaacatat      2700
ttttgatctg agtttggtaa agtattattt tacctgctgt tgtactacca cagactgttg      2760
acttttagtt tcttaaagag aaaaattgcc tttttactag aaagcctttg tatattgcaa      2820
tttttctgtt tgggaaaatc taaggattta ctgtggttag tcttacagaa gaaatgtgga      2880
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aatgagctct gcttccaaag ttatttaatt ttctcagtgt ttgaatgtta ttttttgtaa      3060
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aaaaaaaaaa aaaaaaaggg cggcc                                          3145

<210> 861
<211> 3145
<212> DNA
<213> Homo sapiens

<400> 861
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aaaatgaaga aaaactaaga cgcagtcttc caaacctgtc ccgaacatct aatacacaag       120
ttgactcagt gaaaagcagc agaagtgact caaattttca agtgccaaac ggaggaatac       180
ctcgtatgca acctcaggct tcagccatac cttctccagg caaattccgt tcccctgcag       240
caccatctcc tttggctctt cggcaaccag tgaaagcatt tagtaaccat ggctctggtt       300
ctcctggtag ccaagaaata acacagctca cacaaaccac ctcctcacct gggcctccta       360
tggttcagag cacagtctca gcaaatcctc ccagcaatat caacagcgct actctaacca       420
gacctgcagg gacaactgca atgagaagtg gcttgcccag acccagtgcc ccttctgctg       480
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cttaattagc acaaaccgac agagatcatc aaacagcact ttaatgacat ttaacatcag       780
atgtgtttgg taatcataca atcactctcc atagaatcac ttttagtttt gtttaataga       840
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gatgccaaag agaaatgccc atttgtaaat gagaaaaatg cccatttgtg cacaagaaaa       960
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aatgagctct gcttccaaag ttatttaatt ttctcagtgt ttgaatgtta ttttttgtaa     3060
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aaaaaaaaaa aaaaaagggg cggcc                                          3145
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<210> 862
<211> 3195
<212> DNA
<213> Homo sapiens

<400> 862
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ttgactcagt gaaaagcagc agaagtgact caaattttca agtgccaaac ggaggaatac      180
ctcgtatgca acctcaggct tcagccatac cttctccagg caaattccgt tcccctgcag      240
caccatctcc tttggctctt cggcaaccag tgaaagcatt tagtaaccat ggctctggtt      300
ctcctggtag ccaagaaata acacagctca cacaaaccac ctcctcacct gggcctccta      360
tggttcagag cacagtctca gcaaatcctc ccagcaatat caacagcgct actctaacca     420
gacctgcagg gacaactgca atgagaagtg gcttgcccag acccagtgcc ccttctgctg      480
ggggcatacc agtgyctcgc agcaaacttg cacagcctgt tcgcagatcc ttgccagctc      540
ctaaaaccta tggtagcatg aaagatgaca gttggaaaga tggctgttac tgaccagcaa      600
agacaagaat gcagaagtcc acggcttcat ggatacctt caccaggcta aaaaacaact       660
tttatatgca gactgttcag ataagactct tgggatttat aaaatcccag ccctctctgt       720
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aactaggttg atttttaaaa aatatttgac agaggccaat atctgggcaa atacctaatg      900
gatgccaaag agaaatgccc atttgtaaat gagaaaaatg cccatttgtg cacaagaaaa     960
tggtgaattc aggctatcca aaacttcaca ttcaacctaa tttactgtat aaatagtatc     1020
aataaatatt tgtgttaatg agaactaata ttctgactaa ttatctaaag tgtttcacta     1080
gtacaccagg aaactacaga ttgagattag ggggtgggag gaaagaaacc tgggctagag     1140
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ggagggggt atctcatgtc taagtaagta aaagaaagaa gtagctactg tctctttttaa     2460
aaaccacgta caaaacagaa caagtctcag ttttcagtgc aacatttcaa aaaatatata     2520
tgctgcaatc taataattaa aaggaatttt acctattatg aaacwtatta cattttttaa     2580
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510

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gttagataat cagtttcaaa aggagtattc aggttattta actttgtttt taaatggctg    2640
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ttttgatctg agtttggtaa agtattattt tacctgctgt tgtactacca cagactgttg    2760
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tttgataaac tagtgcctat gattttaact tatgtttgat atatagtagt aagggtttta    2940
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aatgagctct gcttccaaag ttatttaatt ttctcagtgt ttgaatgtta tttttgtaa     3060
gtgtgttaat aaaagtgtaa agaattggaa aaaatataaa tattcttaac tcaagcaaaa    3120
aaaaaaaaaa aaaaaaaaaa aaaaaaatta aaaaaaaaaa aaaaaaaaaa aaaagtacct    3180
cggccgcgac cacgc                                                     3195
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<210> 863
<211> 3195
<212> DNA
<213> Homo sapiens

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<400> 863
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ttgactcagt gaaaagcagc agaagtgact caaattttca agtgccaaac ggaggaatac     180
ctcgtatgca acctcaggct tcagccatac cttctccagg caaattccgt tcccctgcag     240
caccatctcc tttggctctt cggcaaccag tgaaagcatt tagtaaccat ggctctggtt     300
ctcctggtag ccaagaaata acacagctca cacaaaccac ctcctcacct gggcctccta     360
tggttcagag cacagtctca gcaaatcctc ccagcaatat caacagcgct actctaacca     420
gacctgcagg gacaactgca atgagaagtg gcttgcccag acccagtgcc ccttctgctg     480
ggggcatacc agtgyctcgc agcaaacttg cacagcctgt tcgcagatcc ttgccagctc     540
ctaaaaccta tggtagcatg aaagatgaca gttggaaaga tggctgttac tgaccagcaa     600
agacaagaat gcagaagtcc acggcttcat ggataccctt caccaggcta aaaaacaact     660
tttatatgca gactgttcag ataagactct tgggatttat aaaatcccag ccctctctgt     720
cttaattagc acaaaccgac agagatcatc aaacagcact ttaatgacat ttaacatcag     780
atgtgtttgg taatcataca atcactctcc atagaatcac ttttagtttt gtttaataga     840
aactaggttg attttaaaa aatatttgac agaggccaat atctgggcaa atacctaatg      900
gatgccaaag agaaatgccc atttgtaaat gagaaaaatg cccatttgtg cacaagaaaa     960
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aataaatatt tgtgttaatg agaactaata ttctgactaa ttatctaaag tgtttcacta    1080
gtacaccagg aaactacaga ttgagattag ggggtgggag gaaagaaacc tgggctagag    1140
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tgattgccaa aagggcttaa tatcagttgt acaatctttc tgaactttat agttcctggc    1380
tcaggaaaga tggcctttgc tattgaagcc aacttcttca catgctgtta tctttacaga    1440
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gaaatcggct atttcaattt tatcagactt ttaccagagt aaaacttgct tctgtagcag    1920
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aaaccacgta caaaacagaa caagtctcag ttttcagtgc aacatttcaa aaaatatata    2520
tgctgcaatc taataattaa aaggaatttt acctattatg aaacwtatta catttttaa    2580
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gttagataat cagtttcaaa aggagtattc aggttatttta actttgtttt taaatggctg    2640
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ttttgatctg agtttggtaa agtattattt tacctgctgt tgtactacca cagactgttg    2760
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tttgataaac tagtgcctat gattttaact tatgtttgat atatagtagt aagggtttta    2940
tgaatgttga ttattttgtg ccaacagccc agaattgtca cttatatgta agcagaaaac    3000
aatgagctct gcttccaaag ttatttaatt ttctcagtgt ttgaatgtta ttttttgtaa    3060
gtgtgttaat aaaagtgtaa agaattggaa aaaatataaa tattcttaac tcaagcaaaa    3120
aaaaaaaaaa aaaaaaaaaa aaaaaaatta aaaaaaaaaa aaaaaaaaaa aaaagtacct    3180
cggccgcgac cacgc                                                     3195
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<210> 864
<211> 1262
<212> DNA
<213> Homo sapiens

<400> 864
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cccacgcgtc cgcagatatg cttcatgatt gtgaccagtc atgttatttc tttcaaattc      60
ttccagtggt ttgtccctgt gcatctgtta attcagttca cgtacagcag agcatgtagt     120
tatgctgtct ctctgtcatc tacttgacat tctatagaag tgaacactcg aaagaactgg     180
tcaacaaaga tgaaagtgca gcaaagcaat gaaaaatgat aacactggaa gtgaaatttt     240
aatcaaacat aaatgaattt gtagaagaag tcactgacca tgggaatgtt gttcttgctg     300
ctgtgtattc ataggagctt agtgaaggca aacttaccaa cacaaataag caaagtggtt     360
gcaataaaga cagatacgtc ccagaggaag tgatggttaa aaaaaaaaaa actttacatt     420
aaaagatatt taatgtgaat atagaaatat ttcacaacat tgaaagcaca agcaataaaa     480
gggtggaagc tgacccaaac ttagaaggag tatggcagtt tgccgtgaac ataaaagatg     540
cttactcagt atggtaagtt acttgccaga aaaaaaggca agccctattc aaactacttt     600
gtttttacaa tgaaataaaa cactttaatt ctatttctaa tgttttaaat tacagtgtac     660
taaatatttt taaacatttt tgcatttttt tctacattta taactggtct taagagtttt     720
taatatttga gcagaacctt aaaggtcatg gaacaatcat cattttccct attgaatatt     780
aagattgcag gaccattttt atggtcccac agtaccatgt gaaatgagga tcgcttgtag     840
ctgggaacag tgcttacttc agggaaaact gattttgata gaaccgacta gttgagtatt     900
aaactgtttt ggaaataatt tatatatcta agtgctgaaa tatatttctc ttctccccac     960
ttattcaaat aaaaaagttt taatactata aacttttcat tgttagcgcc acgcagtcct    1020
tgtcaagatt gttctggggg acaaaaactt gatgtataaa gcatgaatat acacacagta    1080
cttaaacaga taccatatct gtggtattaa aattttgggg gtggttgatt aggattgtaa    1140
aaagactcct tagggagtga ggatggaaaa gagaaacact ggttaataca gagtataaat    1200
aaattttttg gaaattgaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1260
aa                                                                   1262
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<210> 865
<211> 388
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (388)
<223> n equals a,t,g, or c

<400> 865
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ggtgcccagt agaggtgcag tgcagcagcc agctcgcagc agtgctcccg tagagctgat      60
ggcattggca ggagtggcgg ctcagcacag ggaagttctc cagtgcccag gcccaggctt     120
gctctcggtt taggtcccat ggcacgtggg gctctggacc tgcctgcctc caagacagct     180
cttccaaggt tgagggttgg aactccacag cctcagcctc ccaaagcttg accaggccca     240
gccatagcta gtctaggaaa agagcaaatg gccgtgtttt tatattttga cttttgcatt     300
tcaatattaa ttttttttggt aatgtaatgc attcaaaaca tggtcccccc ccccccaaaa     360
aaaaaaaaaa agggcggcct taaaaggn                                       388
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<210> 866
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<211> 408
<212> DNA
<213> Homo sapiens

<400> 866
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gccgctgctg ctggcgctcc tgtcgttggc tctttgccga gggcgtgtgg tgagagtccc   60
cacagcgacc ctggttcgag tggtgggcac tgagctggtc atcccctgca acgtcagtga   120
ctatgatggc cccagcgagc aaaactttga ctggagcttc tcatctttgg ggagcagctt   180
tgtggagctt gcaagcacct gggaggtggg gttcccagca cagcactggc ctttcggaag   .240
catcccagta gggttttctg aggctcgctg gtgactcatg ccctaattgc aatcctctgc   300
ttttatcttg actttgaagg atctaacact gctctctctt ccaaaggga aaaaaagatt   360
catttgtttt gagcaataaa ctaatacaaa atgaaaaaaa aaaaaaaa   408
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<210> 867
<211> 3014
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (614)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (619)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2968)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2989)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2998)
<223> n equals a,t,g, or c

<400> 867
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gtatttaaac caaaatgaac tgatacttgt tggaatgtat gtgaactaat tgcaattata   120
ttagagcata ttactgtagt gctgaatgag caggggcatt gcctgcaagg agaggagacc   180
cttggaattg ttttgcacag gtgtgtctgg tgaggagttt ttcagtgtgt gtctcttcct   240
tcccttctt cctccttccc ttattgtagt gccttatatg ataatgtatg gttaatagag   300
tttacagtga gcttgcctta ggatggacca gcaagccccc gtggacccta agttgttcac   360
cgggatttat cagaacagga ttagtagctg tattgtgtaa tgcattgttc tcagtttccc   420
tgccaacatt gaaaaataaa aacagcagct tttctccttt accamcacct ctaccccttt   480
ccattttgga ttctcggctg agttctcaca gaagcatttt ccccatgtgg ctctctcact   540
gtgcgttgct accttgcttc tgtgagaatt caggaagcag gtgagaggag tcaagccaat   600
attaaatatg catnctttna aagtatgtgc aatcactttt agaatgaatt ttttttcct   660
tttcccatgt ggcagtcctt cctgcacata gttgacattc ctagtaaaat atttgcttgt   720
tgaaaaaaac atgttaacag atgtgtttat accaaagagc ctgttgtatt gcttaccatg   780
tccccatact atgaggagaa gtttgtggt gccgctggtg acaaggaact cacagaaagg   840
tttcttagct ggtgaagaat atagagaagg aaccaaagcc tgttgagtca ttgaggcttt   900
tgaggtttct tttttaacag cttgtatagt cttgggggccc ttcaagctgt gaaattgtcc   960
ttgtactctc agctcctgca tggatctggg tcaagtagaa ggtactgggg atggggacat   1020
```

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tcctgcccat aaaggatttg gggaaagaag attaatccta aaatacaggt gtgttccatc    1080
tgaattgaaa atgatatatt tgagatataa ttttaggact ggttctgtgt agatagagat    1140
ggtgtcaagg aggtgcagga tggagatggg agatttcatg gagcctggtc agccagctct    1200
gtaccaggtt gaacaccgag gagctgtcaa agtatttgga gtttcttcat tgtaaggagt    1260
aagggcttcc aagatggggc aggtagtccg tacagcctac caggaacatg ttgtgttttc    1320
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tttgtaagaa atgagatgca ggaaagaaaa ccaaatccca ttcctgcacc ccagtccaat    1620
aagcagatac cacttaagat aggagtctaa actccacaga aaaggataat accaagagct    1680
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cttcttcctt tccgggtgag agaagaagcg gagaagggtt cagtgtagcc actctgggct    2040
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agtgctcagc tgaaatacca accccaggaa taagaactcc atttcaaaca gttctggcca    2160
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aaaataatct cactacatgt agcagtacat tatatgtaca ttatatgtaa tgttagtatt    2520
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ggtaaaatgt agagcaattg caatgcatca ataaaatggg taaattttct gaaaaaaaaa    2940
aaaaaaaaaa aaaaaaaaaa aaaaaaanaa aaaaaaaaaa aaaaaaana aaaaaaanaa    3000
aaaaaaaaaa aaaa                                                      3014
```

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atggggggaac gtaattktra gcgggatgcg ctctctttag aatcgcgtcc tcccaaatgc    60
tcccgccgtc ccattaccgg aatggggacc attcggctgc tgcagatagg actttctctc    120
ccattcttta ctttttttatt agccaatcaa agtggcttcc gaaagccatt tgtgatttgt    180
gaaaaatagt atctttcaaa atgctgagtt gaagcatctc gctcattgct ccttgaattt    240
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cctagggaac tgcttttctt actatggagg aagtctgggg aaggcatgag gtatcccctc    780
ttggtcaggg wtgaggyacc caaccattga gattcccatg ccagcttgat gcgggaccaa    840
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ctcccccggc aaatagtctc tatgggggaa tttattctgg actacccwam attaggggtc    960
tggaaaaaca ggctgctcga aattttagca cagawkgtgk aattcagggc agtaaaaggt   1020
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ctgagaaagg caggtgggta tgggcaatct gacacgatcc aaaaggctta ctgccttgca   1140
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gtaaaaagat ttcaaataag ccaccatttg aactgggaag ggaaactagg gatggtcttg   1260
ggggaaaatg tcattctctc taagaaaggg accccgggga tgtgggtcgt tttgagggtc   1320
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ncccaantta ac                                                        1572
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<210> 869
<211> 1207
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1206)
<223> n equals a,t,g, or c

<400> 869
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ttgtccttga aagatggggc tttggataag caaaggagag cagcaaggc attctaggta    120
ggaggaatga tatggggaaa ggtttgggga taagaaaata caaaatattt aggaaagata    180
gcagatcact tttgacatag aagaacggaa aataggtcag aactttaatg cttctgatca    240
aagataattg acaatcttct agaattaaaa tagaccatgg tgtgattagc gggaaagaag    300
tgactatgga actaatgaat gttaggacca gattgtggag agttttgagt gtcaggtttt    360
tgggattcat ccacgttgtt gtgtatgacc tcctcccttg ctgaggagta ttctattgta    420
atacacacaa tttatccatc tgctctcctg ttaattaatt aacaagggtc atttccaggt    480
tagaggtatt acacataata aagttactct aaatattctt gtataggtct tttttgtggt    540
tttacggtct catttctctt gagttgatac ctagaaatga aagggtcata gcacaggtat    600
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tccttccagc aatgtatgaa ttttggtttg ggagcacata tatttaaatc aggaatctga    720
aagatcgatt tcaccatagt gtaaatggat ggagtggaag gaactgaagg taaggggtca    780
atgcaggagt ccacgcatga gctactaagg gtctgcactc aagcggccac acagggtgag    840
aaacgaatga gctattttgg gagtgaaatt taagtgaaat tctatagaaa tagaggaatc    900
aaagttatct cgatttcaag cttgagggaa gcctctgttg gcggaaaaga tgggtttctt    960
ctggggtgtg tttacagtga ggggccatct cactggcaat gtggaagagg tcggatctag   1020
agaccaatct aaaagtcacc tggctagaga agacaatcaa atccagaagt tcatagaaca   1080
aaataaaggt gaacataggg cagctaaagc ctaaacattt tgtaattaga aagcagttag   1140
ggtgtgttaa aaaaaaaaa aaagggcggc cgctctagag gatccaagct tacgtacgcg   1200
tgcatnc                                                              1207
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<210> 870
<211> 839
<212> DNA
<213> Homo sapiens

515

<220>
<221> SITE
<222> (833)
<223> n equals a,t,g, or c

<400> 870
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tatactaaag ggttcctttt tttttaatgt ttacatttat ctctatgttt acctttttag   120
tcacattgac ctgctggctg aatacctcaa atagtccagt agagggcagt ccaccaggca   180
gaaaaggtta ggcgttttgg tttcacatct ttgctgggga ataataggg aaatggctgt   240
ttttgctaat ttttagctaa tatctagcca ggagagcaag cacataggac agactgaaag   300
actgtaattt tacacaatac acatggctta attattttat tgggatacag aaaaatataa   360
attctggaca aataagtcat atacctgttt tcagtcctaa catttaagga ttcttgagtc   420
ccaatcacat aactgtggtg ttactctgtc atttatatgg tgtcaaaagc acttgatgag   480
taaacccagt aacatctttt tgagtgtttc cataatgcat tttccaactt gaaaacaata   540
attgaaaaat agccttattg tatattttat gccatgacta aaagtgccat ttttactgat   600
gctattagac tgataatttc ttgaagtgaa atttaacctt tttttctctt tagtattatg   660
tttataatgc catattttta gaaagcattc cagatcaggc atggtggctt acacctgtaa   720
tcccagcact ttggaaggct gaggtgtggg gattgcgtga agccacaagt ttgagaccag   780
cctggttagc aaggcaagat ccccaactct acaaaaaaaa aaaaaaaaaa aanaaaaaa   839

<210> 871
<211> 1332
<212> DNA
<213> Homo sapiens

<400> 871
taatctatga cttttttggta caagaacaat ggaaaaagtg aattaaggta atgaacaaaa   60
cctttcaccc acttaaacat tttccagttt tgagattcct cttcgtgttt gtggtgtctt   120
ccccttgtta cccccttctgc ccttttttctc tgactatggt aatttggtct ttaggctcat   180
atcagtctcc ccgagacatt ctgcagtcat tatccacctt ttgggtggat tttattttgt   240
tttattttgt tttttttaaa aaaataactt tttaacattg gtgcatattt gcttgggata   300
gagcttgtgt aatttaccaa tcgtattgat tgtaagtgat tgtgccctgc agaggtatat   360
ttaacaagac aaaaataatc ttgggtaata aaggagccca tgagatttga gtcaggttgt   420
aagtgaaatc acttacactt ttggatagaa tttatactcc tgctcttata aatcagtggt   480
agacttacca ttttttaaag ttttcttgca ttttttttgtt tttttattgc cacagctccc   540
tattctttct tgcctgcctc cacccccctg ttcaggaaaa aaaaaaattg agccttaaag   600
tgacagctga tttttttaatt gctgaatttt gtgaaatttt acttttttcca agtgtttcca   660
actttaaaaa gagaagtgaa gacaaatagg ttggaatggt gaagacaaat gggttggaat   720
ttcacaggct gtgaataatt ccttaggatc tggcaaaccg tgaagtctta tttgaagacc   780
ttatctcctg agagttcttt tggagtagga aaaagaacct atttgaaata gaccgttttt   840
ctcttgtttt taatctgttt aatatttctg attttttaagc agctttcaaa acaagtgtgg   900
tggaaaaaaa gaaatagtag taggaagatg tttagggcag cagaactctg ggtctaaata   960
agtacatgtt cccacttgtt gccgatttt gagagtacta gggccatctt tctcaatttt   1020
gtattatttg tgtgcatgtt tatatcaaag atgcccattt tgttaaaatg ctatttcctt   1080
tattaccttg gaaactgact cagcctcatg ttgctcctaa ttagtgttta aggctcccat   1140
gagttgcaga taaaatgatt tattttaaca agtagaagga ggtgattcac cttttggatt   1200
gtaaatatat gaaaatgtct acaaggtctt tatctgcttt ctgtcagcat ttatattaaa   1260
tgataaatta atgaggaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1320
aaaaaaaaaa aa   1332

<210> 872
<211> 1978
<212> DNA
<213> Homo sapiens

<400> 872
ggcacgagga gagagttgaa ggagctgaga cacttgccta tctgattgaa ccagatgttg   60
agctacagag aatcgctagc ataactgatc acctcattgc catgcttgct gattatttca   120
agtatcccag ctcagtgagt gccatcactg atattaaaag gcttgatcat gatttaaaac   180
atgctcacga actccgccag ctgcattca agctctatgc ctctcttgga gcaaatgatg   240

516

```
aagacatccg gaagaaggtg agtctgggag aggggcgtcc cccagtcctg acagccagca    300
ggcagggagt gacgtcaacc tgaaagtcgt ggtgaagagc actaacagtg actgtttgaa    360
tataataaag cagagtgact aaaggcataa ttgaagaatg aatgggaccc ggatttgggg    420
ggttgtttgt ttgttttttag aacatagagt ggcatggccg tgctggaatg acaaataact    480
ggcgtgcttt tttttgtgt cattaatatg aattattatg ttgcacattt ttgcatgtgt     540
tctgataaaa atcaattcta gcactgtgaa gcttcagaca ccttgaaagt cctaacatta    600
gaattgtaaa tgttatttat ggaaatacct tccaatgcta ttgagaaatt caaatctcta    660
ttgtatattg ttctttgata tgtggcttag ttttatgttt tgattttttt tgctactgtg    720
caagtttaat gtgaataaaa tctttgtgga atgatgattt tatgtttagt gagtggtcat    780
ctgaattttc cagctcccca gaaaatgtat gcactggtat agcacccttaa tgttactaaa    840
gcctagtcta acactgaact catgttcttg atgagaatac ttctagatga ggagtatagt    900
ggtaagtaag ctctgacttg gctccttcca caaaccaaaa agctggaact taccactcaa    960
aaacatgtat aacctaataa attctacaca aggctttcaa gaccatcaga gagcaaaacc   1020
acatgttctg tcttgaggag ccatagcaga aagagcaaat tagtcattat ttactgaaca   1080
tgatgattta ctaaatctct ccatctgcat tagtatttta aggagcactg tgagagaaat   1140
cacaaagtat tagagtttac catgattcag agaagttctt cagscctgta gaaagaggag   1200
tatggaacaa ccttacattt gttgaaatwa cttgaaaagg aaccawttct tgaagaaact   1260
gaagtaatag caataagatt tgatgtgtga gtagctttga tttaaaatca atgcaaaaag   1320
cacaactaat aaattgaatg tttccatgta cctcacttta tttcagttam caagatactt   1380
tgacttgaag tgtttttagt gtatccctat gaaaatcatt tttggtacat ctaagttttc   1440
acttataaac tgttatttca aagcaaacat actagtgata tatatatgat ttatggatgt   1500
tgacgccaat gttcagtttg ggtacgtkgg tgtattgcaa ggggagaggc ttttataaca   1560
atagatttga acatttttaa aaaattggac tgtgtaactt aaatacacaa ttatttggtt   1620
taggatggtt attagggccc attagaaaca ggagaagtat tttacccatt cttaaagctc   1680
taaaaaacca tctcatggac tgaaaggtag atagacagat ggaccacaat gggaaatagg   1740
atgtccattt gtacttcttt gtactttttt gttaataaac tgttttggaa ttaatggctt   1800
aatttgtgat atcatgttct agaaatacct gcaacatgac agtctaatca gtagtctatt   1860
aaaacttgta ttcataatgt gtataatttc ctggtaaggc taactcctga tcgtttctgt   1920
agaaagatga caaataaaga aaaagttata attaaaaaaa aaaaaaaagg gcggccgc     1978
```

<210> 873
<211> 626
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (617)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (618)
<223> n equals a,t,g, or c

<400> 873
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cctgtgaaat tgaagtgaaa ctatctctgt aggacttaag agaatagcta aaaggtgtga    120
cttgccttat tgaactgata ctggcatatc tgactgtaag cagtaggttg aagatatcat    180
tttatgaatg tggagaattc tacattgaaa cagaaaatac ctgggaatga agattaaaaa    240
tgtagctgct gttatttgct tggtgattcc cctcttgctc ttctttagtt tgaaaaaaca    300
aaaacgtggc cttggaattt tcattttgat gcagaaattt tgaaattgaa aatgtgcatg    360
ttttggtgca caaaatcctt ctgtgggcaa aactttgttt ttgttttgca cagtaagaaa    420
caataggcaa gcgttatgtt tttggtaagt taactatgaa agctttctta tttttattat    480
taaaaatgta acaatttaac ccacaggaaa aaaaattact ttgtatgctt gtttgaaccc    540
tatgggttcg ttttattaat aaaattatta cactaaaaaa aaaaaaaaaa aaaaaaaaaa    600
aaaaaaaaa aaaaaannaa aaaagg                                          626
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<210> 874
<211> 1882
<212> DNA
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517

<213> Homo sapiens

<220>
<221> SITE
<222> (1270)
<223> n equals a,t,g, or c

<400> 874
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aaaactataa agattttta aaagctctgt ctcagctaga atttttaaga ttataactga      60
acagtatagc ccttttagtt gtttgaaaat tacataatga ttcaaaagct tgtttcactg     120
cctttcccag cactaagaaa attaacaatc atttctttta atwtccttga atcagagcca     180
ttctaaagtg actctggacc agcaattctg agctatgatt tcatgataca tgtattaata     240
tctaaatgag ttgtgagttg acataagaac catagttcca taataattat cttcaaatca     300
atggatatct taaatgtgtt tttttcttcc ttagagatta ttattaaact gatgtatttg     360
ataataaaga attttaggac tgagaaagtt aagttttct taccaataat aagatattga      420
aatatataaa ttataaaaca gaaataaaat gaaataaagg aggttatccc taaagtcatt     480
taccttagtc acttgcaatt aaatatggkt acttcggrag ragaagtktg gccctaaagc     540
tactgtaaca tgaatcatgc cctaatgtgc actatatatg aactactttg gtcagaaggc     600
agcggcgggt aaggatggct tcctctcaca gtgcttctta ggctatccat ttaccaagga     660
attctaatct ctttctctca cttcaccagg aaaggaggga gtttaagata tagaactggg     720
catgctagcc tctttttttcc cttttgtgga tttgtcataa ctgcagagaa ccgatgttgt     780
ggtctcttgc cagctacatt gtgaaccttg cagtgaaagt tctttgcctc tgcaaaggga     840
gatttgtgct tgtgcagaac tgcccatgcc ttagtaagca ggtctgtcta attctaagtt     900
caatatctgg tggctattgt tggcataaac ttaaagtaca tcctctaacc tagcctttt      960
cagcagtaaa cttaaaatat tgaatctcca tctgtctgtg tctcaagtgg ttcagaggtc    1020
aggagaggag arggacatta wtttatgact ccctccaaac tttaacaaga ctagtgcaga    1080
twawatttcg aagtaagcat gagrtatatt aaaaaccaca tgtgggaaty cttycctaat    1140
tttagaggtt ttttttaaat aatggaaatt ctattgaaat tgagtagtgt taattacaag    1200
gcaacaggta aacatttgtt caggatattt aaaaggtctg ctgagttgga attgtgacag    1260
accacattgn tgactctaga ttgaawtgga agggaagaat gtgaaatgaa ttaggatatc    1320
ctctgttcac ctctattaac tttcttaaat gagtataact tagaaataat aaaatgcaag    1380
tattttaacg ttatagttgg gagagttttg acaaatgtaa acacccactt caccaccact    1440
accatcctga tatagtgtgt gtccatcacc caaaaagttc tctaaagccc ttttgcagtt    1500
ggttcccctc cacctgaaca gccatcccta gtcaactact tttctgcttt ctgtggctat    1560
acgttagatt tgacttcaga attctagagt ttgaaataaa taggccatat aatatgcact    1620
cttttgtgt ctgactttt ttttgcttaa catgatgctt ttgaaaccca tccatgttga    1680
gattcatcca tgttatcatg tgtatcaata ataagttcct ttttattgct gaatagtatt    1740
ctagtatata gatataccac aatttgttta gctgttcacc tattgatgga catttaggtt    1800
gtttcaagtt ttgatctatt atgaataaag ctgctatata tataaatcac aaaaaaaaaa    1860
aaaaaaaaaa aagggcggcc gc                                            1882
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<210> 875
<211> 820
<212> DNA
<213> Homo sapiens

<400> 875
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cccgggtcga cccacgcgtc cgaacaacga tatggcagga gccagtcttg gggcccgctt      60
ctaccggcag atcaaaagac atccggggat catcccgatg atcggcttaa tctgcctggg     120
catgggcagc gctgcgcttt acttgctgcg actcgccctt cgcagccccg acgtctgctg     180
ggacagaaag aacaacccgg agccctggaa ccgcctgagc cccaatgacc aatacaagtt     240
ccttgcagtt tccactgact ataagaagct gaagaaggac cggccagact tctaagccag     300
gctgggctgc cagtgccatg caagccacag ccagccagcc catccacttc ttccactcct     360
ccccgcaggc cccaaggcat cactccggcc accctgtccc gctactgctt acacaggccg     420
ggttcccacg cagaggggag gctgctccac ccctactctc ctcccttgct cccagcagcg     480
gaagcgcctc tgacccttgg cttgagtccc acgtggggga ggaggaggca ggcagcacca     540
gcagggcctg cccaggctgg ggcacctttg cctcctgagg cgcagcgcac tcctcccctg     600
cccaagccta ctgcctcccg ctgccgccag tacccctcc agccccacac ctgggcctcc     660
ccctgccact cccctccctt gctcccctct gtccccaggg atcaaacaga agcagccgtg     720
ggcaaaatac aatttcattt aacaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     780
aaaaaaaaaa aaaaaaaaaa aaaaaaaagg gcggccgctc                           820
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518

<210> 876
<211> 2485
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2479)
<223> n equals a,t,g, or c

<400> 876
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gatttacaca gcatcatgta ttgaatattg atttctcctt tttcatagca ttgaaaaggt      60
gattatatat gtgttggtct agttctgtgc tatttttttt ccactggcct gtttgtctat     120
cctttgttta ctaccaccaa gctataactc ttgatagctg gtaatgaagt cttccaattt     180
tgttcaccct caagattgtc ttctggcttt tcgtatttcc aaataaattg taaaattgat     240
ttgccatttt tcacacacac accccttgct ggtttcttga ttgggattgc attaagtctt     300
ttgatgattt gagaattgac atccttacag tattgagtat tctaacctgt gaatatggta     360
gaaaccattg tgtattcagt tatttgattt ctttcagtta tgttttataa ttttctgtgt     420
agaggtcttg tatatgtttc attagattta ttcttggta tttgttttt gatactatta     480
taaatggtat tgttttaaat ttttattttc taattatagc aacttgtatg tagagtcatg     540
tgccacttta tgatggggat atgagaaatg cattgttagg cagtttcatc atgcaaacat     600
catagagtgt acttacgcaa atcatgcaaa catcatagag tgtacttaca caaacctaaa     660
tggtacatgc tgctacacac cttagctgta tgatatagcc agttgctcct agactgcaaa     720
cctatacagc atgttactct actgaatacc gtaagcagtt gtgacacaat gatgagtatt     780
tgggtatcta aacatatcta agcattttta aaatgtacag taaaaatgta aaaagtaaaa     840
catggtacac ctgtttaggg cacttaccgt gaatggagct tgcaagacta gaagttgctc     900
tggaagaatc agtgaatgag tgaatkctta ggacatcact atacactact gtagacttta     960
taaacactgc acacttaggc tacactaaat ttatttttaa aataaagtaa ttgcaatatg    1020
atgttatgac agctatgatg ccactaggca gcagaaattc ctgagctcca ttataatctt    1080
ataagaccac cgttgtatat gtgatccttc gttatgtggg acatgactcg atataaaatg    1140
gattgttata ttgacctttt atctgatgac ttaactaaat ttacttatta attttactag    1200
ttatctatag tctcattttt cctgtgtaca caattaattt atttgtaaat actaaatgtt    1260
tccttttttc attactcata tattttttc ttgccttact acactgccta gtaaaatata    1320
taaaatatgt gcttcacgga aaggggactt tgattaagga catgcctcct tcagagcttt    1380
ttctttttccc cctagtattt ccaacttggg gatgtttggc atcgacgaat ttactgcagt    1440
gattaaccct cctcaggcct gcattttggc ggttgggagg ttccgacctg tgctgaagct    1500
cactgaggat gaagagggaa atgccaaact gcagcagcgc cagctcataa cagtcacaat    1560
gtcaagtgac agtcgagtgg ttgatgacga actggcaacc aggtttctta aaagttttaa    1620
agcaaaccta gagaatccta tccgacttgc ctagtcctca aagataagaa gttggtgttc    1680
agcttagttg attcagtagt tgttaccaag aaacatatgt tataggaaaa caacttggta    1740
tttaagtatg aagtggatga aatgtttatt tatttaaggt gaaagcattt gacccagggt    1800
gtcttcatct tcaatttggg tttaatgtta tagaaataaa tgatgataaa ctctaactaa    1860
taaaggaaag agaatatttg gttactcaga tccatttta acctctggtg ctgtataaag    1920
ggaatattaa actagatgta aatcaaagta tatgtttggc tcatttgagc attttggaat    1980
atttgagaat gtatgataca tgtaaaatta aaaaaactat tagaactgta ccataattat    2040
gttgaaggta gaagtgatct tcaaagagat ggccattaac ttagcagtgg gacctcactt    2100
ttacaagcac tgctctagat atacttgaag aatttaatak gtacagaagt ttattctgga    2160
taataaataa ataaggatca cactgtatta ggggttatgg caacattatt gaatttttta    2220
tgtacataaa gccatatgtt tagggtggtt tctatctgtc ttgtttttca cttatataac    2280
actgtgaact tctaaagmaa gaggataaaa gaagcatgaa tgaaagaat gacatttcaa    2340
aaaaatggtt caatgaaaaa ctatagctaa aatatgtaaa cctttctagg taaaccgctt    2400
gccttcatct tgagtcggaa tatatttaaa taaattgtgt tatctcttgc caaaaaaaaa    2460
aaaaaaaaaa aaaaaaaang ggggg                                          2485
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<210> 877
<211> 1793
<212> DNA
<213> Homo sapiens

<400> 877

519

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ttgttttgtt tgtttgttaa gggaagcacg aagaagaatt tacaaatgtg aataaaattg     180
tttaagatta ccaatagttt cttttctgga cttgaaatag ttacgtttct aaatatgaga     240
aaaataactt tgcctaaaat ttcagtataa tgaccaggtc ttctctccat tttagagaag     300
cagtccaatg tggaacagat aagacggcag cgatccagtg aggtcaattc cccacagagg     360
aaagctatgc atacctaact taatggaagg taaacttctc ttcaattaat gatgtcctcc     420
ttttctcaag gtgtccaaag acaggaggtg gtctgtaaaa ggttggatga caactccatt     480
gtccagaaca attactgtga tcctgacagt aagccacctg aaaatcaaag agcctgcaac     540
actgagccct gcccacctga gtggttcatt ggggattggt tggaatgcag caagacttgt     600
gatggtggga tgcgcacaag ggcagtgctc tgcatcagga agatcggacc ttctgaggag     660
gagacgctgg actacagtgg ttgtttaaca caccggcctg tcgaaaaaga gccctgcaac     720
aaccagtcat gtccaccaca gtgggtggct ttggactggt ctgagtgtac tccaaaatgt     780
ggtccaggat tcaagcatcg gattgttctg tgcaagagca gtgacctttc taagacattc     840
ccagctgcac aatgtccaga ggaaagcaaa cctcctgtcc gcatccgctg cagtttgggc     900
cgctgccctc ctcctcgctg ggtcacagga gactggggcc agtgttctgc tcagtgtggc     960
cttggacagc accttggctg atgctggaag aggagggcag tcagtgtcac ttctgggatg    1020
tgccccagca ctgagaacaa aatgcaggca tcccccgggg cagcatcaga gtgcctttct    1080
agagggagcc acgcacagaa tgtaacagga tgaaacagtt tcaagtaagc cttgaattga    1140
aacctgagta ggttaaaaca attctatttc atagcacatc acaatactgc tgctactctg    1200
tagccacccc catggctaca tgatgcccta ttcctaaata ataacaatag cattgtcagt    1260
ggaggctggg ccaccatggc agaccttcca aaagtagtga gctacataga ctacttaggg    1320
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tactaaaaaa ggaacggtaa atgtacccta atgattaaac cccgtgagat acatatgatt    1440
tccaaatagt ccatttcatt aggaactttt ttgtttgaat gaatgtcaca taggtatcct    1500
cagtaacaca gaacgaaatt acctttgtat tattgtgatt agttgttgct tattattttta    1560
tactcagtaa taatgtggta cactgttaat ttttttgctt ttgtaaatta tattctaatt    1620
tattgccatg tttcctaaca cttgtcctac attcattctc ctgcttgtaa tgaaaatgaa    1680
aaaatcattg taacacttga tggagtgaaa ttccacgcca ggcacagaat ttttttgaca    1740
tagataattt agtaaaataa aaattcagct tataataaaa aaaaaaaaa aaa            1793
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<210> 878
<211> 1005
<212> DNA
<213> Homo sapiens

<400> 878
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ggcagagcca gattaccctt tcttaataaa tatctcaggg taaggaaaga aagaaactgt      60
atagatatat ttaaaataga gaatactttc caagcaatac atgatacttt tcctaaaaga     120
ctctaaaaga aaaagattct gtaactctct tttagcacca aattattgtt tatcttgctg     180
gatattttat atgaacagtg ttaatttaga tgcactaaag caaaggtagg caaactacaa     240
ccatgagtca aacatggcca cacccattca tttgctattg tctaagctgg ttttgcacta     300
caactgcaga gttgaataga tgcagcagat cctttacaga aaaagttttc tgacctcaat     360
tctaaagtaa ttgtagtagg gagctggagg actttctttc cctttatggt aatttttttga     420
gctacaaaag agccttgcag aaatgggtga agggattaat cttttaaaaa taaatrctat     480
atattaggaa aataaaaaat attttagagc caagttaaca agtacttcag caaaacatgc     540
tagttttatg caggggattc tgtattccaa atggatacaa tccgacatat ataaaagaaa     600
cagattctta actattgact cttatttagc aaatgcaaca gacaagaata tccaacttga     660
tatttataaa aggtagactt tttccaaaag tgtataagct caaagaaaaa atgcaacctg     720
tcaattaata tatactatgt aatatatatt attgtgtatt tatgattagc catcataaat     780
gcccattgct tggcctttaa gaataatcac aaaatattta tattaaatta tacaaatttg     840
ttgcagaagt gcctgtgaga gaaatcttca aaagacaaac ctggtcaaat aataataatt     900
ttaatgtcaa tgatttttttt tgtctgactc atctgagtta tatttagttt tcaagtggca     960
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<210> 879
<211> 384
<212> DNA
<213> Homo sapiens

<400> 879

520

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gacccacgcg tccggcaaga agctagagag tgacttagga tacagtgtaa atatattagt      60
aaattaagac agttctgcaa gatttttagg acttctattt ttcttctatt catcatttat     120
gaagtattct tgctagaaat agtttatgtc tctctatctt gctgagtgat gaatactcgg     180
ccaggatgct aaaatgtggt ttcatgaagt atgttgtgtt tctgtctgtt cttgtttcct    ·240
tccttgaaat gtgtaaaagt gaaaaacata ctaatcataa atcaggtatt catcataagc     300
ctaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     360
aaaaaaaaaa aaaaaaaaaa aaaa                                           384
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<210> 880
<211> 548
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (537)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (539)
<223> n equals a,t,g, or c

<400> 880
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gttgcattta ggatagtcag tagcatcctg gcctctagcc tacagagacc agtagcatct     120
cccatcatga caaccacrma tgtccgccag acattgccaa atgtcctctg gggacacagt     180
tgcctccagt tgagaagcac tagtttaaat ttagaaaaca aattggggaag gatatataac     240
aaattcgtaa cagtaccctt tgggatatgg gattggagga atggctttca ctcctctttt     300
aacataaaat ttttaaaact ggattttgcc tccccctaca gacatttttt ttttattttc     360
aactgtggtt ttttttccca ttttataaaa agattaacct tgaaaggtaa tatcacattt     420
caattttagt cattatggat tttactgtgg aaggcagttc tatacaccta tggctgcttt     480
tcaacctagt tttattggat tttgtttgac attgkgaatg kccyttttcc caaagangng     540
gatagaca                                                            548
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<210> 881
<211> 499
<212> DNA
<213> Homo sapiens

<400> 881
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cccacgcgtc cgctctagca agtcacagca gtttagggtt gacatagcag agttcaaatg      60
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cccatagtca tttttcagatc caatggccca gtggcattct ggcagctctt ttctattctt     180
cattcttggt tggaacctga aggtagtatg ctcctctggc tttggtctaa tatttgaggc     240
cactctgcct tcctagtatt tgtataatat ggcccccttaa gcccctaccg tgatggctag     300
gaagtgggag tgaaagttaa ggctcttggg atggtgggag gaaagacaat tgatttattt     360
ttgagcacgt atccaaaata aataaataat atatttataa acataaatgt atatgtctat     420
gtgtgtatgt atgcatttat gtatgtatta tatataaaat gatttatata aaaaaaaaaa     480
aaaaaaaaaa aaaaaaaaa                                                 499
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<210> 882
<211> 1289
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (433)
<223> n equals a,t,g, or c

521

<220>
<221> SITE
<222> (538)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (598)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (629)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (710)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1177)
<223> n equals a,t,g, or c

<400> 882

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tgctcttctt caatttattt tgttatctag gctcagtatt aatttcaggt cagattttca     180
ctgttttaag ccaaaatatc acaaaacgca gagtaacaac aacatgatct ttaaaataag     240
tttaaagagg gtgtagccag aatctccctt actcctgatg tttcttagta attttcttag     300
taatttactg actttctaat ctgctccttg gctattaatt cccacttgcc catgctgttg     360
aacccaatct ctctcagaca ttgcaaaatc ccattgtagt ggtccctata cctagaacga     420
ttgaataatt ttnctttaac aaatctcatc atccagatac acctgttgat gtgtaaaata     480
ttacacaaac aaaaatcaaa aatttcaagt aaaaagtaaa cccaaacatt aaaggaangg     540
ctaaaataag aagttcttct ctctaaactc agtctaacca tcctttcccc aaggtaanca     600
ttgttttcct gacccttcca aataaatgng tatgaaatcc ggycctggaa tttgcactaa     660
aagamtggta ctatatacac cattcagcaa cttggytttc cycatttaan ggawatayct     720
watagacctt ycwawayctg cacatacaga cccacytctt ccggtttcat agaagtgaca     780
taattcaact agtyccycat tgatgwakgt cctgcttttt tycctattgc aaataatact     840
gcaatatcat tgtgtgtatg tattatgcat gtatgttcat cttggcaaac tttgaaaata     900
tatccttata gtaaattaca tgcatttaga agttttgatg caagtggaga attgccattc     960
acaatgttcc catcaattta tatatccata aaaattgtat gaaagtaccc ttttgcttat    1020
atcctagaca acattggtat caaaacgttt ttattctgaa agacaaaaaa ggaagaaaag    1080
atataaaact gtttttattt gtgtttcttt ttttttttaa caacagaaac ataacacttt    1140
cccaggggag ttgtcgatac atttcccact atcctcnaga ctagttctct cctcgtgccg    1200
aattcctgca gcccggggga tccactagtt ctagagcggc cgccaccgcg gtggagctcc    1260
aattcgccct atagtgagtc gtattaccc                                      1289
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<210> 883
<211> 1182
<212> DNA
<213> Homo sapiens

<400> 883

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ttcatgaact acctcagggc tacatcagta caaaatagtt taaattagta aaataaagta     120
gtttcaaagg gaaatcattg acgacttcag gataagtgcc accaccattt gggaacagag     180
gatagaaggt agccatgtgg ttattccatg atgcaggaat caggtcggca ggtggactgt     240
cattgctgtc ttgcggcagc tggcctctgc cttcagggta ccaccgtctc caggacacaa     300
atgggcagca gaaaaatgtc accttgttga tttcttcaaa gaggttgggt gacacctcac     360
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cattccatat gaacatgtac ccctcaggaa ggccagccac cagctccagc agctcaatgt    420
caaacactaa tacggcactg ccgggcactt ctccatccac gccagcttcc ccatagccca    480
ggtgaggcgg aatgatcact gtccgtttct cgccaacgca catctctctg agacccatgt    540
ccatccccaa cacaacttgc ccagatccca gaacaatatt gtaagttttg cctaaattcc    600
acgtggagtc cagcagggtc ccatccagaa gtgaggcatt gtagtgatat ttgaggtaat    660
ctcccttctt actcagcact gagcagtcag ggggtttgta gtgggaggtg atgctgatgg    720
agtccgaagg gttgtggaag tcgatcacat ggatgtcaaa caccagcaca gccgagccgg    780
ggatattccc tcttccttcc tctccatacc ccaggtgagg cgggaccaca atccttcgct    840
tttctccaat gcaaacacca agtagacctt catccatccc aggaatcacg tagccctgcc    900
caatgtacgt gtcaaacgtg cggttccgag agtagctgga atcaaagagg gtgccatcca    960
gaagcgtgcc attgtaatga tacctgagaa agtccccact ttgacttatc cgctcacagt   1020
tttcaggtac taccttgttc tcaatggaaa tgctgtcctt ggggttatgg aggtccaata   1080
atgcaacatc aaacaccaga gatgcctgac cgggaatgtc tttcccatct ccatcctctc   1140
cataggccag aaaaggagga atggtgatga tgcgctcgtg cc                      1182
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<210> 884
<211> 1648
<212> DNA
<213> Homo sapiens

<400> 884

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gagcctgggc aagcattctt aggttgatgc tggggcccag agtagcagtg agcatcctgt    180
gtgaagatgg catttctcac tgattattgg aaaagcacta gaagagccac gtgctggagc    240
cattgtccag ccttgccctg gaggagcagt gtctggcttt gtccctagat tggtccactg    300
ggaaaactgg aagggctgtg gagaccgtct ctcaggactt gtttgggaac cagaagaggc    360
tgacgaataa cattctgccg ggcttcttca tgggttccct gtgtctaggg ccggggacca    420
gcccttgaag atcatcagca gtgactccac agggcagctc cacctcctga tggtgaatga    480
gacgaggccc aggctgcaga aagtggcctc atggcaggca catcaattcg aggcctggat    540
tgctgctttc aattactggc atccagaaat tgtgtattca gggggcgacg atggccttct    600
gaggggctgg gacaccaggg tacccggcaa atttctcttc accagcaaaa gacacaccat    660
gggtgtgtgc agcatccaga gcagccctca tcgggagcac atcctggcca cgggaagcta    720
tgatgaacac atcctactgt gggacacacg aaacatgaag cagcgttggc agatacgcct    780
gtgcaggggtg gggtatggag aatcaagtgg caccctttcc accaccacct gctcctggcc    840
gcctgcatgc acagtggctt taagatcctc aactgccaaa aggcaatgga ggagaggcag    900
gaggcgacgg tcctgacatc tcacacattg cccgactcgc tggtgtatgg agccgactgg    960
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tcccacaagg aaaccaggag ggagactgcg agtgagtgcc cgggaccacc tcatcagaga   1380
tgcttactgc agccctgcag gtgcctgtgc actgatggaa tccacagtgt agtcagaaaa   1440
gctgttgact tctcttaaat cagcttccct gctgggcccc tgaaagtgga ctgggtgatt   1500
ctgtctggca gagagtgggg aaaagacgcg gtttccagct tgcagatttg ttaagtttct   1560
caggcagatt ttgactttca gcctttcata cttgtttaag caactatttg tattaaatga   1620
agttttttga aaaaaaaaa aaaaaaa                                        1648
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<210> 885
<211> 1058
<212> DNA
<213> Homo sapiens

<400> 885

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ggcacgagtg atgatgcacg gaggaccccc tacccaccct ggaatgacta tgtcagcaca     60
gagccccaca atgttaaatt ctgtagatcc caatgttggc ggacaggtta tggacattca    120
tgcccaatag tataagggaa ctcaagggaa aaggaaacac acgcaaaaac tattttaaga    180
ctttctgaac tttgaccaga tgttgacact taatatgaaa ttccagacag ctgtgattat    240
tttttacttt tgtcattttt catcaagcaa cagaggacca atgcaacaag aacacaaatg    300
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523

```
tgaaatcatg ggctgactga gacaattctg tccatgtaaa gatcctctgg aaaaagactc    360
cgagagttat aactactgta gtataaatat aggaactaag ttaaacttgt acatttctgt    420
tgatcacgcc gttatgttgc ctcaaatagt tttagaagag aaaaaaaaat atatccttgt    480
tttccacact atgtgtgttg ttcccaaaag aatgactgtt ttggttcatc agtgaattca    540
ccatccagga gagactgtgg tatatatttt aaacctgttg ggccaatgag aaaagaacca    600
cactggagat catgatgaac ttttggctga acctcatcac tcgaactcca gcttcaagaa    660
tgtgttttca tgcccggcct ttgttcctcc ataaatgtgt cctttagttt caaacagatc    720
tttatagttc gtgcttcata agccaattct tattattatt tttgggggac tcttcttcaa    780
agagcttgcc aatgaagatt taaagacaga gcaggagctt cttccaggag ttctgagcct    840
tggttgtgga caaaacaatc ttaagttggg cagctttcct caacacaaaa aaagttatta    900
atggtcattg aaccataact aggactttat cagaaactca aagcttgggg gataaaaagg    960
agcaagagaa tactgtaaca aacttcgtac agagttcggt ctattaattg tttcatgtta   1020
gatattctat gtgtttacct caattgaaaa aaaaaaaa                           1058

<210> 886
<211> 1332
<212> DNA
<213> Homo sapiens

<400> 886
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ctgaggagga tataactctg tcctttgaat acccctgtag aacatcatgc ctctcttagg    180
gcctttctct ggctctgcat tgtcttatga aattctatct tacacctccc tttttggatt    240
gagctcctga aggcaaggac tgtcttactc acattatctt catcatggtg ccttgcacct    300
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gaagattatt ctggcaacag tgtgtatcag agaataaaga gcctgaaatc agaaagtaca    420
aatagcagaa ggtcttgggg gatggtgccc agtaagaaca ggaaagatca gaagagtcag    480
gaacttactg catatggggg aggaggtaat aatggtctaa ggcgcgtgga tcctcaaggc    540
ttagakaact gagamgccmg caggaaataa aactgtagca cagttgggtt attgccattt    600
tggtgacagt ttcatgtgtt tttttttttt tttcctgtgt gagtgtgatt ttgctcaaca    660
tgagtttggt aactgggatc agaaaggttt tgttccttgg tacattttac agaatggttg    720
ctaagccaac agaactcaga attgagttca aatcccagct atcccactta ttctctgggg    780
gtttgggggta agtctcttag atgctgtaaa atttaagttc ctcagtaatg aaatgggggc    840
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catgaggcaa gtggtggtgt tgccatcaca atacgtgtga agagaaagga ggcagagaga   1020
ttatgatgac ttgcccaaag aacacagagt tcacactgaa ttggaactgg aacttgggca   1080
gtgtggttgc agagcaccca gtcttagctg ctgtgctgtt tctgactcag tatctgtcac   1140
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aaaaaactcg ag                                                       1332

<210> 887
<211> 2010
<212> DNA
<213> Homo sapiens

<400> 887
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cacctctgtc tgttgctgac gttggggggc ttacacaccc acctcatctc cgtgcacagc    180
catgactggc cctgccggca gctggggtgc aggtaagggt ctctctcata gaggggagct    240
gcagctgaga actggcgagg ccccttcctc caaggcccta gctggccccc gggtgaacct    300
gaggtggcag gttcaggttt tcaagatggt gaggtctcgc tgtctgctgg acagtacgtt    360
aggctctcag aactcatggg tgtggagctg gacctgtccc gggccagtgg acccctgtgt    420
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ccccgttcgc cctcagctgt cccttttccct tgtcgcctgg ccgctgcctc gcccgcctga    600
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agtggccttt ccctcaacac ctgctccccg gccccagagg aacccacctg ttttggagct    720
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caggcagcgt gtgcagcagt ggccagccag agtgccaaag atgcacgggg atgtggtgtg    840
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gacccccacc cccatgcctg taccagggct ggcctccaga gcgggtgagg acagagcagc   1140
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gtttcctaac agttatttgg tggtctcaag agttgaggtt gtggagggtt gggagaaact   1500
gaagttctat acatttccat agagtttaca tcctgcagtt aaaaggcagg gagggctcag   1560
cccgggcccc acagctccag gccatcccta cgggctgccc acagtgcccc cttttctcta   1620
gccgaatctt tttcgaacag cccgggaaag gaaaacggat tcacttgctg attttgttca   1680
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gtggtctgaa gaacaaacca gagaagagtc tggtttggcc agaggccccc tccggcccac   1860
gtcaccctga gtacacccct ctgattgctc tgctgtcaag aagcacgttt ccaccagctg   1920
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tatttttttt gaaaaaaaaa aaaaaaaaaa                                      2010
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<210> 888
<211> 2059
<212> DNA
<213> Homo sapiens

<400> 888
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cacctctgtc tgttgctgac gttggggggc ttacacaccc acctcatctc cgtgcacagc    180
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agtggccttt ccctcaacac ctgctccccg gccccagagg aacccacctg ttttggagct    720
cagcttggcc cagcgtttcc ttggggaagg gaaaggaggg ctggacagca ctgatccggg    780
caggcagcgt gtgcagcagt ggccagccag agtgccaaag atgcacgggg atgtggtgtg    840
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gacccccacc cccatgcctg taccagggct ggcctccaga gcgggtgagg acagagcagc   1140
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tcagggcttg caaaaaccaa ccttcgagaa agaaaaggga actcttcacg ttgaatgttg   1260
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gtttcctaac agttatttgg tggtctcaag agttgaggtt gtggagggtt gggagaaact   1500
gaagttctat acatttccat agagtttaca tcctgcagtt aaaaggcagg gagggctcag   1560
cccgggcccc acagctccag gccatcccct acgggctgcc cacagtgccc ccttttctct   1620
agccgaatct ttttcgaaca gcccgggaaa ggaaaacgga ttcacttgct gattttgttc   1680
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cgtggtctga agaacaaacc agagaagagt ctggtttggc cagaggcccc ctccggycca   1860
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525
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cgtcaccctg agtacacccc tctgattgct ctgctgtcaa gaagcacgtt tccaccagct   1920
gtattcaaca ctacaatgca tttttaaac tatatttgca tccaagacaa taaagacacc   1980
ttattttttt tgaaagaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   2040
aaaaaaaaaa aaaaaaaa                                                2059
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<210> 889
<211> 1284
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (47)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (277)
<223> n equals a,t,g, or c

<400> 889

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ggagccccac cgcggtggcg gccgctctag aactagtgga tcccttnggg ctgcaggawt     60
tcggcacgag gcgccagatc ccggttggag agccggggtg caggcgctga gccgggattg    120
gagtgtggtt ggagttgggg agccaagggt gtgtgccggt ggccgggggtt ggggtctccg   180
ccgcgccctc cggccggctc ccgctcactg cgctggctcc tccgcaggat gcagggtgcc   240
gggaaagcgc tgcatgagtt gctgctgtcg gcgcagngtc agggctgcct cactgccggc   300
gtctacgagt cagccaaagt cttgaacgtg taagtgtaga cgcggcccag ctgggagac    360
aggggcgggg gtgaatggcg aggagactgg cggatgggag gggtggcggc gggagaactc    420
ggctagccgg ttctgaccta ggtccccgcc ttgccctcgc agggaccccg acaatgtgac    480
cttctgtgtg ctggctgcgg gtgaggagga cgagggcgac atcgcgctgc agatccattt    540
tacgctgatc caggctttct gctgcgagaa cgacatcgac atagtgcgcg tgggcgatgt    600
gcagcggctg gcggctatcg tgggcgccgg cgaggaggcg ggtgcgccgg cgacctgca    660
ctgcatcctc atttcgaacc ccaacgagga cgcctggaag gatcccgcct ggagaagct    720
cagcctgttt tgcgaggaga gccgcagcgt taacgactgg gtgcccagca tcaccctccc    780
cgagtgacag cccggcgggg accttggtct gatcgacgtg gtgacgcccc ggggcgccta    840
gagcgcggct ggctctgtgg aggggccctc cgagggtgcc cgagtgcggc gtggagactg    900
gcaggcgggg ggggcgcctg gagagcgagg aggcgcggcc tcccgaggag gggcccggtg    960
gcggcagggc caggctggtc cgagctgagg actctgcaag tgtctggagc ggctgctcgc   1020
ccaggaaggc ctaggctagg acgttggcct cagggccagg aaggacagac tggccgggca   1080
ggcgtgactc agcagcctgc gctcggcagg aaggagcggc gccctggact tggtacagtt   1140
gcaggagcgt gaaggactta ccgactgcg ctgctttttc aaaacggatc cgggcaatgc   1200
ttcgttttct aaaggatgct gctgttgaag ctttgaattt tacaataaac tttttgaaac   1260
aaaaaaaaaa aaaaaaaact cgag                                          1284
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<210> 890
<211> 1288
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1283)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1285)
<223> n equals a,t,g, or c

<220>
<221> SITE

<400> 890

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gcctccgccc cctcaacctt cgcggggcgc gggccgcagc ttttcggttc acagcgggca    60
gggaaagccg cgggaagggt actccaggcg agaggcggac gcgagtcgtc gtggcaggaa   120
aagtgactag ctccccttcg ttgtcagcca gggacgagaa cacagccacg ctcccacccg   180
gctgccaacg atccctcggc ggcgatgtcg gccgccggtg cccgaggcct gcgggccacc   240
taccaccggc tcctcgataa agtggagctg atgctgcccg agaaattgag gccgttgtac   300
aaccatccag caggtcccag aacagtttty ttctgggctc caattatgaa atgggggttg   360
gtgtgtgctg gattggctga tatggccaga cctgcagaaa aacttagcac agctcaatct   420
gctgttttga tggctacagg gtttatttgg tcaagatact cacttgtaat tattccaaaa   480
aattggagtc tgtttgctgt taatttcttt gtgggggcag caggagcctc tcagcttttt   540
cgtatttgga gatataacca agaactaaaa gctaaagcac acaaataaaa gagttcctga   600
tcacctgaac aatctagatg tggacaaaac cattgggacc tagtttatta tttggttatt   660
gataaagcaa agctaactgt gtgtttagaa ggcactgtaa ctggtagcta gttcttgatt   720
caatagaaaa atgcagcaaa cttttaataa cagtctctct acatgactta aggaacttat   780
ctatggatat tagtaacatt tttctaccat ttgtccgtaa taaaccatac ttgctcgtat   840
ataccccctg cctccttctg ttccagtcag ccaacatatg tacataaaag aacacacaaa   900
ttcaagaagt tggaagatta aattatctgc ttatttagtg taggatggtc aggtagctag   960
ctataagtga aaggaaattt tgctgaagag actgagaaat gggtagtgga atgactatca  1020
agatgacctc aaactatta aaaacatttt aacttgccat gaagaatctt gatgattttt  1080
gtataaatgt tgtataaaat tcttttacag ctacagattt ttaaatagga tcattgtaar  1140
gattaatgag ataatgtttt aacatagtgc ctgggtccat gataagtgtt aaattttca  1200
attaccctca gtaactgata atgtagcaag aaaatactct atattcagac agacctgaat  1260
ttgatcccag ctctatacta ccntngna                                     1288
```

<210> 891
<211> 1980
<212> DNA
<213> Homo sapiens

<400> 891

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gggccagcag cagaacttcc actcggtgcg ggagatgttc gagtcacaga ggatcggctt    60
gaacaactct ccagtgaacg ggaatagtag ctgtcaaatg gccttccctt ccagccagtc   120
tctgtaccgc acgtccggag ctttcgtcta cgactgtagc aagttttgac acaccctmaa   180
agccgaacta aatcgaaccc caaagcagga aaagctaaag gaacccatca aggcaaaatc   240
gaaactaaaa aaaaaaatc caattaaaaa aaacccctga gaatattcac cacaccagcg   300
aacagaatat ccctccaaaa attcagctca ccagcaccag cacgaagaaa actctatttt   360
cttaaccgat taattcagag ccacctccac tttgccttgt ctaaataaac aaacccgtaa   420
actgttttat acagagacag caaaatcttg gtttattaaa ggacagtgtt actccagata   480
acacgtaagt ttcttcttgc ttttcagaga cctgctttcc cctcctcccg tctcccctct   540
cttgccttct tccttgcctc tcacctgtaa gatattattt tatcctatgt tgaagggagg   600
gggaaagtcc ccgtttatga aagtcgcttt ctttttattc atggacttgt tttaaaatgt   660
aaattgcaac atagtaattt attttaatt tgtagttgga tgtcgtggac caaacgccag   720
aaagtgttcc caaaacctga cgttaaattg cctgaaactt taaattgtgc ttttttttctc   780
attataaaaa gggaaactgt attaatctta ttctatcctc ttttctttct ttttgttgaa   840
catattcatt gtttgtttat taataaatta ccattcagtt tgaatgagac ctatatgtct   900
ggatacttta atagagcttt aattattacg aaaaaagatt tcagagataa aacactagaa   960
gttacctatt ctccacctaa atctctgaaa aatggagaaa ccctctgact agtccatgtc  1020
aaattttact aaaagtcttt ttgtttagat ttattttcct gcagcatctt ctgcaaaatg  1080
tactatatag tcagcttgct ttgaggctag taaaaagata ttttttctaaa cagattggag  1140
ttggcatata aacaaatacg ttttctcact aatgacagtc catgattcgg aaattttaag  1200
cccatgaatc agccgcggtc ttaccacggt gatgcctgtg tgccgagaga tgggactgtg  1260
cggccagata tgcacagata aatatttggc ttgtgtattc catataaaat tgcagtgcat  1320
attatacatc cctgtgagcc agatgctgaa tagatntttt cctattattt cagtcctta  1380
```

```
taaaaggaaa aataaaccag tttttaaatg tatgtatata attctccccc atttacaatc    1440
cttcatgtat tacatagaag gattgctttt ttaaaaatat actgcgggtt ggaaagggat    1500
atttaatctt tgagaaacta ttttagaaaa tatgtttgta gaacaattat ttttgaaaaa    1560
gatttaaagc aataacaaga aggaaggcga gaggagcaga acattttggt ctagggtggt    1620
ttcttttaa accatttttt cttgttaatt tacagttaaa cctaggggac aatccggatt    1680
ggccctcccc ctttttgtaaa taacccagga aatgtaataa attcattatc ttagggtgat    1740
ctgccctgcc aatcagactt tggggagatg gcgatttgat tacagacgtt cggggggggtg    1800
ggggcttgc agtttgtttt ggagataata cagtttcctg ctatctgccg ctcctatcta    1860
gaggcaacac ttaagcagta attgctgttg cttgttgtca aaatttgatc attgttaaag    1920
gattgctgca aataaataca ctttaatttc agtcaaaaaa aaaaaaaaaa acggcacgag    1980
```

<210> 892
<211> 2501
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (521)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (548)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (550)
<223> n equals a,t,g, or c

<400> 892
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tcactaagcc tcccagctcg gtagacatgg aagaaaaggt gtccttcctg cattatagaa      60
aaagcacaga tatgccagat gtgtgcttca ggcctggttc ttgatgtgtt aattgaggct     120
aacaggtttt agatgattcg tttcatttct aacagaacca gttgttcaaa actattgtct     180
tgtttccagt gccaaagctg tggatattca atgatgttta tcactctccc cctgccgctg     240
cagtcctacc ctgcactgct aatcctccct cagcaaacag atgcccctgg gaacaatgta     300
ggggtgagca caaagaaatt caggagaaga aagtacattc atgtaattca aaattgttat     360
ctctatcata agatagtaaa aagcctttgt tcagattttt tattgtgagc agtgttgtat     420
ttttttgttaa tgtttcaagg ggataggttg atattttgat atcacttaga accgagtcgg     480
taaactacat atttatcttt gatcaactaa gattctgttt ntaaagaaaa gaggacatct     540
ttggctantn atgattacgt aacagtgaat ggcaggtgcc atatggatcc ttggagcaca     600
gacggacatc aaccagcaag tatttctcag attctaccct aaaatatgac agtatgtcag     660
gtgtggacta atatatgtaa tagctttcaa aaggaactga acaactagca agtaaagagt     720
aatttatatt aaaagatccc aataatagat ggactatggc aagaacctct gaactagtct     780
ctctgcttct tctctacctc tttacagtgt attatctaca ctgcaatcaa aatcttcctt     840
ccaaatgtta agtaactgtt caatggcttc ccatgggact cggaataaaa gctcacactc     900
tttacaatgg ccctgcaggt tcctcatctc ctacctccag catcttcact gtccctctgc     960
tccaaccaca ctgcctcttt cttattcctc cagacctccc aacacagccc tgcccccaag    1020
acccttccaa tgactctgat cctcttccct gcgctaccca gtgtctcact ccatcgattc    1080
ctccacatcc tgccaaatgt cacctaacca gaaaggcttt gttgaaccac cccagataaa    1140
ataaagtccc ctgcctttac ccatcactct ctcttgcccg gtttaattct ttctagcact    1200
tacattgtga taatttcttt tctgcctcct gcctcttttc attggaaaat atattacatg    1260
agaggaggtt tgctttattc attgctgaat gttcagcacc tagaataata cctggcacaa    1320
aataggtcct caattattat acccaattcc tcccagttct cttggaagtt tctccatttt    1380
accattgaaa attccacatc cttgtgattc actttgtccc agtgaattcc aaacagttgg    1440
ccatcctacc cttaatagat agttgttgaa tgaaggaaag gaatgaagaa aaaagaatga    1500
ggacagggaa ggagggagga atctaggaca gaaaagaagg gagagaggaa aaaaaggatg    1560
ttaatatttt cttgttctat atgtagaaag caaaagagta ttttgtaat ctttttttcag    1620
caaatgcctg gatcaaattc aatatgattt taaagccatg agaccttctc attcttggtt    1680
ttgatgttgc acggtatcat aatacatctg attggaattt caatatcagg tttaatatac    1740
```

528

```
tatgcaagct ggtataggct ctgaaattat gcatattcat gagagcaatc acacccttac     1800
ttttgatata actggcaaag taaggtacca caagagaaca ataatcaaag aaaaagggag     1860
gactaccagt tgttatttac ttatgacatt ttactggaaa aacttaagca acatgaaaga     1920
ctatttctaa atgaagtact aaaactaaca agacaatgtt ataaagtgtc atattttctt     1980
tcctttata caataaaaca ttgaaaagct ccaccactat gcagccactt caccagatgc     2040
aataatatcc aaatgtgaaa gtaattaata atattgtagt tttaattccc ttggtatttc     2100
agagatatcc tttgaacagc ctaaatcaaa tcatactggt acttatgaga aatagatatc     2160
tcttgtgagt ccttatattg tgcttcccaa gaacctacag tgcatttcag ttatttacct     2220
tgaaaattct tcagcccatc cagagtgggt ttggaaattt gtaatcattt tgtagaatgt     2280
gataagggag gacctgtctt cctaaattct caagcttgga attttcaagt cagtgtcagg     2340
accataggct ctctaatgca tatatatttg ccctgagcaa ataattattt atctctgtgc     2400
ttcggtagtt gcatctgtat gttaaaaata agattattgc tatgttgatt tcttatgaca     2460
tgagagaaga ggctttaaaa attaaaaaaa aaaaaaaaa a                          2501


<210> 893
<211> 672
<212> DNA
<213> Homo sapiens

<400> 893
ggcacgaggc tctgccttcc ctggtcccca ctgcccatat ctgtggactg ccccttccaa       60
agacccctgg ggggggtggg gcattccgcc cacccctttc ccccatcact tctcgcctgt      120
cagtgattcc atgtttcgta acgggggatt ctctgccttt ttgtatcaaa gaacaagcaa      180
atggaccccc gcccgctgca ggcgcccata gccatcgggt ctctaaagct gagtggctag      240
cagcgtttgt ttgtttgttt ttttttttt ttctgaaggt gggacagtca cttcctcctc      300
cctccccacc cctgtcgcat ccacgtgcga cctggaggac tggtcagaac cgttactgtg      360
aatgagtgaa gatcctggag gaccctgggc cccaggccag ctcccatcgc tgggggacgg      420
tgaacggcca tgtgttaatg ttacgatgtt tttaaaagac aaaaaaaaaa aaaaaacctc      480
aaaagttttt ttaaagtggg ggaaaaacat ccaagcactt taattccaat gtaccaggtg      540
aactgacgga gctcagaagt tttcctttac accaactgtc aatgccggaa ttttgtattc      600
tgttttgtaa agatttaata aaagtcaaaa aacttgcaaa aaaaaaaaaa aaaaaaaaaa      660
aaaaaaaaaa aa                                                          672


<210> 894
<211> 1947
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1947)
<223> n equals a,t,g, or c

<400> 894
gaattcggca cgaggctaac tgaaaggtca aaaattacat ccatcagtca tggttatgtg       60
caagtccttg tagaagcttt tattaaagtc atgctaaatc acaagaattg acatttgtac      120
caatatctga aacttcttca tgttttttca ataacataca gcttctgcct gtgtagatat      180
tatgccatca gttggttctc aaaagtattt taagtgcttc agatgtgtgt tcccattata      240
ttttgaaaac atgaaaaatg ctttaatgca tgtatgtacc agcagtggtt acttgcatgt      300
gtagtgtttt tcaagaggtc tgggtcttaa caaaatgttt tcctttatct cagtgctctt      360
ctgcctcttt ttgttggtgt ccttgagaac aatacacctt ctattccttc attggttaca      420
cctttcctgt gacatttagc gagtttcaaa cttccca tatgaggcta agaaacctca      480
aawttcagga attgggaaaa ataaaattag cacttgcaga agtagcagca gatgggaaaa      540
tgccttgatt gacattttct ttcagcattt aaaattttg gcattttaca gcttcatgac      600
aaacagtttt gtgcccatac cttagaaaat gtggtgctga gttaaataaa ggctgtttga      660
gcactggagc agaaaaatgc attatttgca aactggtgga taattttgtg ccttctcttc      720
tggccaccaa gccagtgtag aaacagcaaa aatgtcataa aaattcttat atttaaaaca      780
aaaacaaaag caaaaacaaa cattgaatta aattaagttt tgtaatttta aactttaaaa      840
acttctactg aaaatatttc cgccaaatgc catcaatatt ttagactgta cctcgtttgc      900
aaaactgctt tgagagggaa gagtggacaa ctcccatcag ccttattctc ttgagaacta      960
tattttggtt cctagtaaca gcctttccaa agctctactc ttggtttta ttactcataa     1020
```

529

```
atgtttaaat tagaaaagaa gggaccttgt acatgtgaaa cctaattgac. tctctatatt    1080
ttggacaatt tatgtatctg aaatgtgttg tctctgttat atgatgttat ttttgccagg    1140
agactacagg ttgatttagc ttgatagctg aaatttgatg gaaaactgat ttccatttag    1200
tcttaccaag tgttgcttct ctcttactag acagatatcc acttagtaaa atctaaagca    1260
gtatgtaaat gaaaccagca aagagagtag ggtttatttt ataaacattc ttaatgctaa    1320
gtaaccagtt gttcaattta ttatatgtgt ctgaggacat taaaacacca taagrttgta    1380
ataattggtt gtgccaatgt gtgagggatt tacctttagg ctctctgtca ccagtgattt    1440
actagtgtta gctgtttaac acattatctg tatttagtag tgattattta tttacaagtt    1500
ggtggtaatt cagcagtcag gactctaagc ttttatagtt gaattgagga aatytcgctt    1560
ttattcattt agctggcaac tgcctttatt gcagacctct ggtgcttggc tttcaaggaa    1620
gcctatgaga tgccaaaatc acacctttag agagcacctt gctctaatag gtgatgcatg    1680
agcaaacagt gagatttgaa ggggtttaa cataatttag aatgtgaaaa aaatatcaat    1740
tcatatcttt caagtactaa cccctcaaaa aagcccacac atacaaaata tgtgatgtga    1800
taccactttg tcttttaggt ctttaagtaa ctgaagttaa gcacagaaaa aaaaatcact    1860
tcatggaaat ttcagtaaga aacccaaact tctaaaaatt gcttgcagat gagctaaaaa    1920
aaaaaaaaaa aaaaaaactc gggggtn                                         1947
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<210> 895
<211> 2311
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2301)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2311)
<223> n equals a,t,g, or c

<400> 895
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tcaaatgaca tatttttattg atttattgca gattcagtgc atatgagcca aattgttgag     120
tgtgtaagag ctatattgtg tatttttatta aattaatata tagttgtgtt gcaaaaatat     180
ttgggcttat attgtaaatg gcaagtgttg ccttggtagc tgtcgaactc tatgagtttt     240
gttttttcct gcttcctttt ccccatggag tgtgggaagc agtgcctcag agcaaagtct     300
cttgtttaat gtatagtcta ccaagtacta cagtacataa tctgttcaaa atgtgtttga     360
gtgagctgat ggagctaact gaaaggtcaa aaattacatc catcagtcat ggttatgtgc     420
aagtccttgt agaagctttt attaaagtca tgctaaatca caagaattga catttgtacc     480
aatatctgaa acttcttcat gttttttcaa taacatacag cttctgcctg tgtagatatt     540
atgccatcag ttggttctca aaagtatttt aagtgcttca gatgtgtgtt cccattatat     600
tttgaaaaca tgaaaaatgc tttaatgcat gtatgtacca gcagtggtta cttgcattgt     660
gtagtgtttt tcaagaggtc tgggtcttaa caaaatgttt tcctttatct cagtgctctt     720
ctgcctcttt ttgttggtgt cctttgagaa caatacacct tctattcctt catttggtta     780
cacctttcct tgtgacattt agcgagtttc aaacttactt ccatatgagg ctaagaaacc     840
tcaaatttca ggaattggga aaaataaaat tagcacttgc agaagtagca gcagatggga     900
aaatgccttg attgacattt tctttcagca tttaaaattt ttggcatttt acagcttcat     960
gacaaacagt tttgtgccca taccttagaa aatgtggtgc tgagttaaat aaaggctgtt    1020
tgagcactgg agcagaaaaa tgcattattt gcaaactggt ggataatttt gtgccttctc    1080
ttctggccac caagccagtg tagaaacagc aaaaatgtca taaaaattct tatatttaaa    1140
acaaaaacaa aagcaaaaac aaacattgaa ttaaattaag ttttgtaatt ttaaacttta    1200
aaaacttcta ctgaaaatat ttccgccaaa tgccatcaat attttagact gtacctcgtt    1260
tgcaaaactg ctttgagagg gaagagtgga caactcccat cagccttatt ctcttgagaa    1320
ctatattttg gttcctagta acagcctttc caaagctcta ctcttggttt ttattactca    1380
taaatgttta aattagaaaa gaagggacct tgtacatgtg aaacctaatt gactctctat    1440
attttggaca atttatgtat ctgaaatgtg ttgtctctgt tatatgatgt tattttttgcc    1500
aggagactac aggttgattt agcttgatag ctgaaatttg atggaaaact gatttccatt    1560
tagtcttacc aagtgttgct tctctctctta c tagacagata tccacttagt aaaatctaaa    1620
gcagtatgta aatgaaacca gcaaagagag tagggtttat tttataaaca ttcttaatgc    1680
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530

```
taagtaacca gttgttcaat ttattatatg tgtctgagga cattaaaaca ccataagatt    1740
gtaataattg gttgtgccaa tgtgtgaggg atttaccttt aggctctctg tcaccagtga    1800
tttactagtg ttagctgttt aacacattat ctgtatttag tagtgattat ttatttacaa    1860
gttggtggta attcagcagt caggactcta agcttttata gttgaattga ggaaatctcg    1920
cttttattca tttagctggc aactgccttt attgcagacc tctggtgctt ggctttcaag    1980
gaagcctatg agatgccaaa atcacacctt tagagagcac cttgctctaa taggtgatgc    2040
atgagcaaac agtgagattt gaaggggttt taacataatt tagaatgtga aaaaaatatc    2100
aattcatatc tttcaagtac taacccctca aaaaagccca cacatacaaa atatgtgatg    2160
tgataccact ttgtctttta ggtctttaag taactgaagt taagcacaga aaaaaaaatc    2220
acttcatgga aatttcagta agaaacccaa acttctaaaa attgcttgca gatgagctaa    2280
aaaaaaaaaa aaaaaaaaaa nctcgggggt n                                   2311
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<210> 896
<211> 2311
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2301)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2311)
<223> n equals a,t,g, or c

<400> 896
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catacgcaag tcacatgacc atttaaatgt gcaaatgtaa gaagattcaa tgtgtttaca      60
tcaaatgaca tattttattg atttattgca gattcagtgc atatgagcca aattgttgag     120
tgtgtaagag ctatattgtg tatttattta aattaatata tagttgtgtt gcaaaaatat     180
ttgggcttat attgtaaatg gcaagtgttg ccttggtagc tgtcgaactc tatgagtttt     240
gttttttcct gcttcctttt ccccatggag tgtgggaagc agtgcctcag agcaaagtct     300
cttgtttaat gtatagtcta ccaagtacta cagtacataa tctgttcaaa atgtgtttga     360
gtgagctgat ggagctaact gaaaggtcaa aaattacatc catcagtcat ggttatgtgc     420
aagtccttgt agaagctttt attaaagtca tgctaaatca caagaattga catttgtacc     480
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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<211> 2053
<212> DNA
<213> Homo sapiens

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532

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<211> 396
<212> DNA
<213> Homo sapiens

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<210> 901
<211> 916
<212> DNA
<213> Homo sapiens

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tctggaagag gaatgatcaa tgatgacact tattccaagt tctcagcctc acagagcaat   180
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533

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<210> 902
<211> 1860
<212> DNA
<213> Homo sapiens

<400> 902
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ttctgcaatg ttaagttagc taccatataa ccatgacctc agtgttctgc aatatatgcc      180
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<210> 903
<211> 1490
<212> DNA
<213> Homo sapiens

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aatctgaaat acaaagattt ttttgatcca gttgaaagtg atgaagacat aacaaatgtt      180
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<210> 904
<211> 783
<212> DNA
<213> Homo sapiens


<400> 904
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<210> 905
<211> 1900
<212> DNA
<213> Homo sapiens


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535

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<210> 906
<211> 1900
<212> DNA
<213> Homo sapiens

<400> 906
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gcctgttatg taatttctcc gataaaagat tttgaaagca ggtgctgtgg gcatctgtat    120
ggggaatcgc actcatagaa ttattttcat ttgtaaatat ttggtatcag gccaagcaag    180
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tcaagaaggg gacacctagt ggcagttgac ctttgaggat ctatcctagg atcaggttac   1560
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gataacttct atcagttctg aattctgtac tgtcccaccc ccaaatcatc tatattgttg   1740
catgtactta gctttgtgcc ttgaattgct atttcctttt tatcttgcac tcagatggta   1800
tttttagaga tgtttcttca atcaaaacaa gataaagtta aaaaaaaaa  aaaaaaactc   1860
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<210> 907
<211> 732
<212> DNA
<213> Homo sapiens

<400> 907
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cgccccacct gctgaggtcg gtcctctcag ccctgcctgc cctggcctgg gctctcccag    180
cctcccagcc ctctgccccc tcagatggct tttgttttt  gttttttttt gcatccatca    240
gagactgcac ctctgtgtgg caggcagggc atgggtttta gtcctggcca ctgaccagct    300
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536

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gtgtggccct ggccgagtcg tagccccctg gagcccagct tccatttcta taaaatggtt      360
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aggggggtggt gtgccaggac ctcaggctgg gcctttgtgc tggccttgca gtgggtgtgt      480
ggggaagtca ctgtcccact atgggtctcc actacccagt cactgaccct gggagacccc      540
ttctgtgtgg gagggagcgg gggctggcta gcgggccccc cagccaggga tcccagaggc      600
tgagggttgg ggagaggaag ccatcatctc attacctctg tcagtgcagg ggtggctgct      660
gcttcccttg tgcacttggg tcgctgtgat tgtgaataaa agtgatttcg taccaaaaaa      720
aaaaaaaaaa aa                                                         732


<210> 908
<211> 802
<212> DNA
<213> Homo sapiens


<400> 908
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gatttggtcc tgcctaaatt tcacaagcta ggccaatgaa ggctgaatca aagacatttc      180
atccaccaat atcatgtgta gatattatgt atagaaaata aaataaatta tggctctaac      240
ttctgtgttg ctgtttatct tgttattttt cggcgttata ctaatgtgtt tattgagagc      300
attttacctt ccagacttct catggctaac ttttggtctg tattttgctc cttagatgtg      360
aatatttctt attagtctgc ttcctgctac gcaatgactg catttctatc atttctcagt      420
ttgttagtat atgtggatag tattctactg tataaatgat tgcaaagttt atcaaaaaca      480
aattattata tgtagctttt ctacagtgct ttgctaaacc atgtagtact agttaagtct      540
tccttgaaaa taaagataca ctcttatagg ggacagttcc tgttcactcc caggaaactt      600
ttttaaaaga tgacactgaa tgtttattgc actttagtgc agtgaagtgg caataaaacc      660
taacatgaat caaggttgtt tatggcagat gcatgtgttg ctttacagag tttagcaaaa      720
gctcttaatt ttatgtcata ctgtattcta ctgaataata aagctaacat tattcaataa      780
taaaaaaaaa aaaaaaaaaa aa                                              802


<210> 909
<211> 846
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (4)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (6)
<223> n equals a,t,g, or c


<400> 909
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tggcggccgc tctagaacta gtggatcccc cgggctgcag gaattcggca cgagatttta      120
ccttacactg aatgttctta atatgatttg gtacctaaag taattgaaaa aaatgcagtt      180
tcctttaatc cttgactata agttatacta tgttgcgtac atggcaaatc ctgcaaatat      240
agattaaaaa ttaaattagc ccattgaaat cctttataat tctgtcattt tcccaaggaa      300
gaatagcatt gtacatatgc aatctttatt ttattcttta ttgcttatca gagtgagtgg      360
atgaaaacat ttgtaaggct gcaacataat attaaaatgt gaataaataa atgttctgat      420
aaaatagaaa agaaagtaaa ttacagtgat ttccatcata ttatcactct tgaattttat      480
catctataaa atgagagata aaaatatctc actgaattgt tacttatatc aatttaaaat      540
ttgctagtgg tttgaaaata ataatgtact gactacatgt atgctgttat tgtcagtgtt      600
tccttctata aactgttctt tggaaaaatt aagttataca taaaattcat attaaacttt      660
ttacagaaag catacatgat aaacagttta tggtacttct cagaatcatt tcataataag      720
caatttattt agcttaagtt ccaacttact gttcttatta taaattgcaa agcaacctgt      780
cttacattct tacattatct taaataaat atttctgccc ttgaatcaaa aaaaaaaaaa      840
aaaaaa                                                               846
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537

<210> 910
<211> 1434
<212> DNA
<213> Homo sapiens

<400> 910
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ttctcagccc agggcggccg cgcctccggt gagtttcagc tgagggcgcg cggccagctc   180
cgagcctggc tccgggtgca gcaccggcct gggacctctg ctgtcccgtg tagggggtgcc   240
ctgcaaatat gtgatgaata agtgaagaaa tacgttctat cttctaactt gccggatgtt   300
agaaggaaac caagcttatg cttctcattt atagctaccg ttaaggattg gacagaagct   360
tagcttttg ggtgagacgg acaacagtgt ttttagaacc tttggcaagg aagagctgga   420
aagaacatgt atttgaaagt gactgacagg tcttctggcc ctaggggggcc acctgagcag   480
gtgcacccag cttccctcca agacagaaaa taaattaaga aggagagcag gaagggcccc   540
ggcagactcc agacgggagg gggtgctgcc cgtcaggcag aaggagcttg gaagggaggg   600
gccgtggcca tgggacgtgg aggtggaagc gagggtcatc ataggtctgc acactcgggt   660
tgagtccccc ttccccatca cacacaggac agccagcagt gagctgctta ccccaaggag   720
tcaaggggggt tcttgggcaa cccctggtgc tggagccggc agtggacagc accgcagcca   780
gaccttgctt atttttggct catgaggaac atctgtgacc gttccctccc ctggccctgg   840
gagggggatgt gtgacctcca ctcaagacag ccatgcggct cctccggctg cgggcggggga   900
gggcatattt cccagcacag gcccaggact gccagctgag aggctgggag gggcccctca   960
ccctagact ctgcgtgtga agccaagcgt ggagcctcac agggaatctg agatgggagc   1020
cagtgagatg ggggcaggac ccagaggggga gaagaggtcc tggggatgct gtggatctgg   1080
atccagcgtg cgggagctga ggttccggag tgaaacactg cctttcatgg aagcacgtct   1140
tcctgtcacc catcggcttc attttaaagg atgaaaatgt atcagacatt caaggagagc   1200
tgcatcacat aaaagaaaga ccaggcaaag aaacggaaaa taaatggatt gagaaatgtg   1260
aatgactcca atcattccaa tcattggaat gaatggattg gatagaactc caatccatag   1320
actcagatta gggagatata tttatataat aagaacagga aactgtgaag atgaaataag   1380
acaaaaaaga cacttttgag attaaaaaat tactgcaaaa aaaaaaaaaa aaaa   1434

<210> 911
<211> 761
<212> DNA
<213> Homo sapiens

<400> 911
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tggttgaaat gtaatggagg tgtgatatgt aagatgggtg tggagaggtg caaggtggcc   120
agcccacatg gggcctctta aagactgtgg ttagacaggt ctacgaaaat gtcagaaagc   180
tttcaacagg gaaatgttga catcaggctt cattttttcag aagatctggc ttctgtgtgg   240
agaatggact atgttgggac aaaagacgaa gtgaggagat tagatagatg ccaattttac   300
cagctccggc aagagaggtt gaggcttatg cttggttagc actggaagtg aagaagtagg   360
agcagactgg attcttttct atcagatttg gagtaccatt agccgtataa atcattgtgg   420
ggcgggggaat gcctggtgcc gtggctcgtg cctgtaatcc cagcactttg ggaggccaag   480
gttgggagca ttgcatgagg ccaggagttc caaactagtc tgggcaacac agcaagaccc   540
tgtttctaca aaaaaataaa attaaaaatt aggtagacgt ggtcacatgc accagtagtc   600
ccagctactg ggaaggctaa ggctggagga tcttttgagc ccaggatttt gaagctgcac   660
tgagccgtga tctcaccacg gcactccagc ctgtgcaaca cagtgagacc ctgtctcaaa   720
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa a   761

<210> 912
<211> 441
<212> DNA
<213> Homo sapiens

<400> 912
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atattttgat aaaaagaatt cttgtttttag cacagttgat gcacataagt gattctcata   120
tttgttgtat aaactggttt aatacatttg gaacatagtt ggattacatt catttcctgg   180

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gaaagctagc ttaccataca ttcaagttta taaaacaatt tgccataggc aaagccattt     240
aaaaagttca ttctgaaatt atttcattta cctacagtga aataattgtg aactaagtag     300
tctttctgaa aactgttggg ttctaggcat tcctgagaaa ttgaaagtgg ctacctttca     360
tgtcaaaaat gttgatctat tataaataaa atgttttgc atatgttttt gaaaaaaaaa     420
aaaaaaaaaa aaaaaaaaaa a                                               441


<210> 913
<211> 452
<212> DNA
<213> Homo sapiens


<400> 913
ggcacgagat ttcctatgct taaggcatgt attttcagta agcagttaaa aagacagcat      60
gactttttta ttaaacccta aataatcata tatagctttt ctggtttatt aatgtataga     120
ataattctgc agtggtagaa atttaacagg ggaattttat ccataactat caatttcata     180
ctttacctag ataaccagaa ttatgtgact tgtttgttga aagtaacatg cgttgtatga     240
cttgtttgtt ttttattgaa gtttgcatct caaatgataa tttaaagttt ttgttagtga     300
aagtagggca gtgaccacac ctttatataa ctattattac cttgattaat tgctacattg     360
taaaagaaaa tattttctac aattacagaa tcctcagaac aactctgaaa acaaatgagg     420
tattatcccc aattaaaaaa aaaaaaaaaa aa                                   452


<210> 914
<211> 1699
<212> DNA
<213> Homo sapiens


<400> 914
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ggatcctaat gaatgccttc tgtattgttg tattccatac tagttagggc ctaacaaaag     120
catggcatcg aattgtgtag aggtgactga taaatacaag aaggaaagaa gaaagagtgg     180
ggaggaaata aggggaaagg aagacagaaa gaaagagaaa ggagagaaaa agtcaacaga     240
gcatgagaca tagcattact aattggctga ggaatatcaa agttagtatc tctaccctat     300
tattttccta tttcttttcct gtcccaaagc taagcaagag tggaattatc tccccaaagt     360
cccttgtcct cctctgattg ttacagctgg atcagggtcc tattaattgw tgrtgasggt     420
cmctwgcctg tttccccagg taaccatgag caccttgagc taagtcccyt ttcttagata     480
ccattttaac cagttcccct gactccagcc tttctgctca ttttattgca tacacaaatg     540
tcaggttaac ctgcagcaca gttgtagtaa acagacaaag gcttgcgatg tctccacact     600
gcccaggatg gcctgcatac ttgagctgat ctactagccc tttgcaattc acaatgatgt     660
gcaaaatatt gcctcaatct ggtattcctc actctttgkt aattctgtct ttcaaaatac     720
attctgaaaa tacatctcaa agagaatctc acagtcctca aaatctctta aaatttcctg     780
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agagtaaggg acagggcagt tggatccaga tgggcttctg tttttgtacg atcatgatcc    1140
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atataaggaa ataaaactat ttagcaatct gatctctctt cagaatgctt ttcattaaaw    1260
gatatgagtr kttattgctt aatagtggac tcttcaatgc cagcatcccc cagtaacaaa    1320
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gtctctacta aaatacaaaa aattagctga gcgtggtgac acgtgcctgt agtcccagtt    1560
actcgggagg ctgaggcagg gtatcgtttg aacctgggag gcggatgttg cagtgagccg    1620
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aaaaaaaaaa aaactcgag                      ·                          1699


<210> 915
<211> 1612
<212> DNA
<213> Homo sapiens
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539

<220>
<221> SITE
<222> (806)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (923)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1607)
<223> n equals a,t,g, or c

<400> 915

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ttctggagca ctgatgactg tgcatttgtg atttccttta ggatgccatt tccatttacc   180
aattgctttc ctcagcctgc aattgtgtct tcattctgat tagtttattc catttagatt   240
ttaagaatga tagttgatga ctgccttttt cccaatgtta caatagtaga aatgtggtat   300
cttacatttt ccaaacattt tcttctcctg ggctttcctg taccgttcag tgatggagag   360
ctcacagttc ctattgagat atttatttttc attactatcc ttacatagaa cgcatttcca   420
gaactttttc cttccatkca acttatagct cctctttaaa aacaaaatta ttctatactc   480
catgctttga tactctaaat tcaaccggtc atatttttt ttcttttcct ttctctttga    540
ctggtcaatt cagaaaagga agtccagttc gagtgttcag atgatggtga ggatctatct   600
gccagatttc tcctcctgtg aaaattcaca cttaggaata aaagtcttat ttacctaaga   660
tagtgtaagt aagtggagag ggtgtaggaa cattacaggt cagtgttagt caactatcaa   720
aacacggtac ttctcttaca tattacattg ttttttctct gaaattgaat ttgttataca   780
tgtagatagt atattaagag gtttgntctt ttacaaagtc aatttttctct ttgaaaataa   840
aaagaccatg acagaatgaa tgtctgtata gtgatcagta aaaacaaacr aacaaaaaac   900
tatatgtttt ttttaatgtt ctntatggtg gctaaaatag gagtgrttta taggacaccw   960
taatacattc accatggagt ttataaaggt gtgaaagtga tcttacaatg taccaatcct  1020
agttaagtac ctttaaagga aatgtttatt aaccttcaaa caataaattt aacacctgag  1080
aaataggaat atcttgccca tgcctcataa gagtaattca gtgcatcata caattatctg  1140
atttgattga ttcatgattt tttaaaaaag aaaacacctt gcttctatta acataaaata  1200
attatatcac acaaaagtgc cagagttttt gtatttttaa aagacatcta tgggccagga  1260
gcggtgtctc acacctgtaa tcccagcagt ttgagaggtt gagacagacg gatcacctga  1320
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aaacaaacaa acaaaaaaca gaaattagcc aagtgtggtg gccgtacctg taatcccagc  1440
tactggggag gctgaggcgg gagaatcact tgaacccaga aggcagaggt ttcagtgagc  1500
cgagatcgcg ccatggcact ccagcctggg caacaagagc gaaactccat ctcaaaaaaa  1560
aaaaaaaaaa actcgagggg gggcccgtac ccaatcgccc tataccntct at          1612
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<210> 916
<211> 963
<212> DNA
<213> Homo sapiens

<400> 916

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cacaaagggg aagggcccct gctgtgtgtg agctaggggg tggcatgaca tgcttggctg   120
ggctcatggt tgctatttct gcagatgtca aagaagttct gttaactgat gggaatgaaa   180
aggccatcag aaatgtgcaa gacatcatca caaggaatca gaaggctggt gtgtttaaga   240
cccagaaaat atcaagctgc gttttacgat gggataatga gacagatgtc tctcaactgg   300
aaggacattt tgacattgtt atgtgtgctg actgcctgtt tctggaccag tacagagcca   360
gccttgttga tgcaataaag agattactcc agcccagggg gaaagcgatg gtatttgccc   420
cacgccgagg gaatacttta aaccagtttt gcaatctagc tgaaaaagct ggtttctgta   480
tccaaagaca tgaaaattat gatgaacaca tttcaaactt ccactccaag ttgaaaaagg   540
aaaacccgga catatatgaa gaaaaccttc attacccgct tctgcttatt ttgaccaaac   600
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atggatagaa gattaagctt ctcaaagacg aagaaacgta tcaagtgcat agggaatatt    660
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cacgtgtggg ctatggactc cacctgtcct cacccacgtt attccccagc tgccctctcc    780
agctccctcc ccgcctcttt ttacactctg cttgttgctc gtcctgccct aaacctttgt    840
ttgtctttaa atgtgtataa gctgcctgtc tgtgacttga atttgactgg tgaacaaact    900
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    960
aaa                                                                  963


<210> 917
<211> 2234
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (1337)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (2228)
<223> n equals a,t,g, or c


<400> 917
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gtcttcactt caacagcaca tacaacgctc gggtcaaggc cttcaacaaa acaggagtca    180
gcccgtacag caagaccctg gtcctccaaa cgtctgaggg taaggccctt cagcagtatc    240
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actgcccaca ttcctgaagt gtttccatga cttgctctgc attctgcaca gagccgctgt    360
tcctctcctg cctttagaga gcctatggta tgtggatgtg atcaaaccaa agattccaca    420
tcggcagttc caatggcttg ggccggcggc ttcctttgat aacaatctaa ataagctgca    480
gttgaagaag ctgaaaaatg aaggcctgaa tgtgcccctg gtgtgtaaga caaatgtatc    540
taggctctag agcaggctcc cattctccac cgatacacat catgtgccag ttttgcccag    600
atgattctaa attactctgt agtacttgct tgttctgagg gtgggaccta ggttctttcc    660
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accgagagcc accatacaag gttcatctct agagaatttt tgcttcttag ctatacttta    960
aatattttgg tcatcaaaga caagtaatgt gtctcagatg agaggcttga atttgatggc   1020
cagatataac ctctgaggct tttaacattt tcattttaag agtaagcaag acacatgaaa   1080
ttaaacctac aaggaggtat ttgtggctgg tgccaaagca ttctgacact ttggggtgtc   1140
attttaatca aagaaatcac ccccccacct caccgggatt ctccataact tccctctgca   1200
gaactaatta tgktgatttt gktcaagttc aagatgktag ctaaaagaac tatggtggtg   1260
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tgagggaaaa tgcccacatg aacctgttcc catttggagt acagtgatgt ggtagctaca   1500
gcttccccca gaattatcat tttagcacct tctctcaggg atgacctatc agtttgagag   1560
cagttgcctc ttttctcaaa ataccatact aactgctaaa gccctccaag agtctttcct   1620
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gtttgattga agagtgaagt gcatgcctgc agagcagaga gaaatttgta gcaatgttgc   1740
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tcatcctgca ggaggatgta gcgcctcagt ttattttaat gttcataaga ttatggtgtc   1920
taatttaata aattacagga ttggaactgc gatccttggt accacagtca cagaactggg   1980
ggtcattttc ctagatgaaa caaacggaac aagttctctt ccaacaaaga aactgtactg   2040
tagaaattaa tttcctccat gaattttata tattgtgtac aaatataagg tatgtatctg   2100
aatacaaaga aaagcctatc atcatataga tatcagtatt ctctgttact gcacagaagt   2160
aattttctca tgatgaaata aagttcacac acatactttc tccataaaaa aaaaaaaaaa   2220
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541

aaaaattnct gcgg

<210> 918
<211> 1661
<212> DNA
<213> Homo sapiens

<400> 918

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taatggcagg agctgggtat gcctcgtgac ctcttggact cctgctcaca ttatcactgc   120
tgccttccca gatgagctgt gcaaatagat ggcggccatg agtggaattg gaaacgaggt   180
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gtggagccag gaggggccac tatgggagcc gggccaggaa gctgcattct actgagcctt   300
ttacctcttg caaggacctg cctttcagga gacttcggtc tctaaaggcc agggatggaa   360
gcttcaggga gactctccag ctcctgttta gctctttggt tcagacctaa gtggcgagcc   420
acttgactgg atgggacctc cagccagcca cagcattgga atccagcctg gctcctgcac   480
tgcctttcat attgatgtcc atgacaatcc cagctgtctt gcagtacatg gcacaggcag   540
ccctggcatc ttgaggaggg tgttcagtgt ggtccctggc agaatatgag cctggggcag   600
acaggatgtg gctttagacc gtgaacaggg agccatgccc caggacatac gaccctgtgc   660
cccacactcg cccacactca ctcctggtca ttaatcacag tgctcatggg cccctgattc   720
aaaggaagtg ccagctgtac atgggcccaa tgaactttac tcaagattag aggactgttt   780
aggggcattt gaaatgaatt gtggaaagga catttgtgag accatttgaa aggtcactca   840
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acacttattc tgtgcgaggg tcttacagta aagactcagt gtggcaaggc ccctgttttc  1080
caggacttta caatcctagt tgggagtggg gtgaggtcag gggtgtgtaa gttgaacact  1140
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gaaggtaggc agcaacggtt ccttatccca gcaagtcatg agtatggcag ccaggtctca  1500
tcctgtacag aatagccctc agcatcatcc ccaccaaggg gcaaggaagc cgggtgttca  1560
ttcccccacc tccctctgtc atttgctgag ggctgcattt gaggcattaa ctacccaggg  1620
attctgccat gtcctgctag gagaaaaaaa aaaaaaaaaa a                       1661
```

<210> 919
<211> 533
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (515)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (525)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (528)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (529)
<223> n equals a,t,g, or c

<400> 919
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ttcggcacga gccaacttct atataactca ggaatttact ctcaaacaac actgtcaatt      60
agttacttat ctctctggaa atgatctggg aacatggaga ggaaagggag gaaggggcaa     120
aatctgacca cttaaatcta agcatattag atcattttat gctagaaagt cctgaatgat     180
gtgactttcg ttcttgtaaa acacctcttt ccatagattc atggcccaaa cagtatataa     240
agagtggggga aggaactgca tttgcaaata gttcaaatca ttgctccatc ttaactacgc     300
agttcacaaa gtgtgaagaa atttgatcat ctcaaaaag ataatgggga aaaaatatgt     360
tttgttctgt gactttaaag tcttgcaata ttttacataa atgataatgg gtgctttaat     420
aagaactctt gatactttg ttattgtatt caatatatgc atataataca acaggaaaaa     480
aaaaaaaaaa aaaaacycra ggggggccg ggacnaatcc ccccnatnng aat             533
```

<210> 920
<211> 2099
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2090)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2091)
<223> n equals a,t,g, or c

<400> 920
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ggtgccattc cacaggtaga aacactcaca tgtgcttaga aacgctctgc tttcctcctt      60
gattacccaa attctcattc tgagcttcta tttctccaga tctagactcg ggaatttaat     120
atctgaagac tcatataggg ctgatctacc ctaacttgca aaatttcatg catatttcat     180
acttacactc ttcatatgtc agtggtgcta ttgtttggtt actttctcta tctgtgtggt     240
ttcatcacca gtctattcac ccctatataa aacttaagat ttgagataag aactggaatt     300
tawatgactt mggaaagaat gtatcttggk tagaatataa gagtctgaaa agtctgctgt     360
gggtgctaar ctggctacta agggaaatgc tamcagaaat ttgtcatatg tcttcagagt     420
attgtctggc aactgattaa aacagaggaa gagtgaaaca acatctgctt ctctccacct     480
cacactgata aaatggttga ataaatgcac tttgcttatg gccatgaaga acacagggga     540
cttcatcttt ccaagtgttt tcatacaatg ctcaaggcta attcttttgg tcctgatgtt     600
ttatttctta gcacctgctg gatcaagaag cacccacaag gatcatttct caaaaatgtc     660
tgaaactata tctattctga ctatgaacct tgatcacaat tcaaaccctt aggctactgt     720
tctgattgtt ttcagcatta cccactaact tttgctttct atttccatat tctgtattct     780
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caccaccaca cccagctaat tttttgtttttt agtacaggcg gggtttcacc atgttggcca    1020
ggatggtctt gatctcttga cctcctgatg catccgcctc aggctcccaa agtgctggga    1080
ttacaggtgt gagccactgt gcccagcccg aaagtgctat tcttattatg acctacagtg    1140
gtaatatttc acttaaaaat cagtgctatg cccattgctg gttaacaagc tttggagaag    1200
tattaggttg aaccatagaa actgccacaa ctgttcaaat attgaaaatt ttatatgctt    1260
cagctcatag tctccttcac acacattctc tttcatattt ttttataatt ttattttttg    1320
tatgacttaa tgggcacatg ctgatttcct gtatgtcgtc aacactcctg agccatgagg    1380
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tgaatggagt tatctaaatt ttycagtgaa cttttttggtg tctatgttgt ctaatttttat    1500
tcccttactt tgtgtttaag aaagatctaa tacccacaga gaataccaag gctattaaag    1560
tctaagcagg tgacctacct caaagcttaa gttcctgtta tcataggcct cgtttctcaa    1620
atttgtataa atgtacatgt gatggaaaac cagaagatgc ttggtaaaca tggtcagttt    1680
tactcaatga tgaatggttt cagtgttttt ttgtattaa aggaaacata aatatactat    1740
ggagtaaaat gcaaacacta cacggtttttt taagataaat tctgacactt gaaaggcatg    1800
ttctgcattt agggctattg ccagccccag aaccatggga tgaagtttta ctccttctgc    1860
tggtagagga agtttagtgg aaggtttgag aacctgagcc ctgagtgtag gaaatgcata    1920
gaagtagcaa agtctgaaca acactgagaa ctacacagta aaattagcac ataggattta    1980
```

543

```
ttatcctttg ttgaatgagt atatgagtat atgatgatgc tgctgatgat gatgacaatg    2040
accacgatga tttaaaaaaa aaaaaaaaaa ctcgagggggg ggcccggtan ncaagcgcc     2099
```

<210> 921
<211> 1861
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (54)
<223> n equals a,t,g, or c

<400> 921
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gagcaagtaa tgcccccagc gcccccagcc cagcccactc cccgcatggg aggnccgcca      60
ccaccaacac ctcatcatcc ttctcatcgc taacaccacc acctccatcg gcacccaagc     120
gggcatcatc cccccacact gctcagggga ggggagggat caggcgatga gactgtgagg     180
ccaaaagaag ggggcctgtt ggaggctggg aaccccgcag cgcgaggctg cctcatcaac     240
ggcaagagga aaggaggggt ctcgggacat ctccagaccc taccaactgg gagggtcccc     300
tcctccttcc ctactcctgg gacggcagca aggacatggg ggctgctgtt agcttctccg     360
tcagaggcct catctcactg tagccctgga acccagggtc catcttgccc ttcccccatc     420
catggttggg aaagaagctc agcccctcac agtggcctca agtgtgatgc cttacaaaag     480
caccactcag atgggcagct ggactctggt gtcctgagac tctgccctct tcccacagcc     540
tccctgcccc acccatccct gcaaagccat ttttcagaca gagccattcc taagaacact     600
gaagggctgg aatgctggct ggccactctc tgcctcagtg gcctccctac agcctggaag     660
aaggagggtc ctgattgcca aggaaacctc ctcattgggc taaggagaca ctggagtctg     720
gagtgtggag ccccacagtc ttgcaggtca catgctctcc ttgcacatct ggcctggttg     780
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tctgcccgcc ytcctccatc taacctttcc tgttttatcc gcagcccttt tcttctttga     960
gttagtaaag atttattctg taacctgaca ctcatctggc cctttgcagt ttgccagcca    1020
tattcccatg tgatttccca ctggatccag gcccccatcc ggctggcagg agggggctct    1080
gacgtrcagg ttggaaatca gaagtctgtg agagcgcggg agtgcatggc agctctgggt    1140
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tcgagatccc tttggagcca cagcgaggaa ccctgtggtc ctcaggcagg tgtaccttga    1260
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ctctagccac agcctctagt acactttagc aataccacca gactagttag agttccccac    1440
tcaccaagca agacatgcag tttcatgcct ctgtgccttc gctcatgctg tttcttccga    1500
ctggaatgcc ttccctgct cctcctgcct tgtctgcctg gcaagttcat ctctcacgat    1560
cccctcaaag gcccctcct ccaggaaggc aacccctgtg cccctcccct ccaggctacc    1620
tctgcacttt gtcaatgctt ctcttgtggc acttatcaca ctgtatttta cttgtttaca    1680
tgtttgtctc cccttctaga ctgtgaatcc ttaagggcat ggactgtatc ttatgcatct    1740
ctgtatttct gcgcctagca cggtgcctag cacacagtag gcgctcaata aatgttgaat    1800
gaatgaatga tttaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1860
t                                                                    1861
```

<210> 922
<211> 993
<212> DNA
<213> Homo sapiens

<400> 922
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agaaggattg ccccagagac ccgtggtgga cttcatgggt gctgagtggc ccgtgtgaca      60
gtgatgacac gaaggcttcg gcgtttgagt gggtgcaggt gcacgccagg gcttggtgct     120
tccctgcctg gccctggagg gagctgggtg gcctggcttc aggggaagac aggagccagg     180
acacacgtca gcccagcagg tgtggggggt gctgcagccc tcggcagtgg ggtcaggccc     240
tgggggatgt ttccaatggt gggcagcctg gccaggccgg agaagacatg ttcacgggca     300
tctatcagat gcccccttga ggaggctgag ttatttgagg gctgctgcaa agtacgctag     360
gctcaaattc tcttttccca gccagagccc tggccacacg gactcagagg ggccaccggg     420
gtggggaaag gacccctccc cgaccccccg cagccactgg cctccagctc tcggccacag     480
```

```
aatggcctct aaggctgact cagccgctcc cttgggctgt ggcagcagga ggcggggggct    540
ctggctcagg ccccggagcc tgtgcagctt gcccatggcc ctaggcagcg aggggacagc    600
ctgggggact tcctgcctag gcaaggtcat tggccgggcc tggcctgtgg atagtggggc    660
caggggccgg cccaggccaa atgagtgccc tccttgttat gacaccaagt gactacaagg    720
gaggcaagac ccctccaggc ctctcagccg acactgggtc ccaccacaca cagtgactgt    780
gccgtgcagt gcaggttctg gccttttcct tgaaggcatc tggtagaccc gaagccacgc    840
tctcgggccg cacatgcacg ccgcagcacc agctgccctg agctgcttgt acaaccaaac    900
acctttcccc tcttctccag ctgtaacctg gagagtcagc catgccttgt cttttgttct    960
cataaatart camtggggcc gggcgcagtg act                                 993
```

<210> 923
<211> 1080
<212> DNA
<213> Homo sapiens

<400> 923
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ggaattcggc acgaggtgcc cttccccgta tacttctctg gactcctttc taaggggggag    60
aagatggtga ctccatttta tattttgctt gccttgttgg ttagcatttt tccctcatcc    120
ttaaataaaa attccttgag ggtaggacta tgttaagagt agatctcttt acgttttctt    180
ttaattttac tctcaccgaa ttcttcttcc ccaaccaaac caattctttg gcttctgttg    240
cattttcctc ccttcgttaa ggaaagagat accattgcta tcaaactaag aactctgcag    300
gtggtattct aaaggaatga tcttttccca aggacagttt tcacttggca ggagaggggt    360
agttgggcga gcactccaca tgcatgacgt ttatagtcac cacatccttc aggctgtgtt    420
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ttctgtgggt tgtcagaact ttagccatct atgtctggtg tccaaggatt ggatgtgcat    540
ttgttcgtat ttctatcact tgtaataagt aaccatacta cgtccttttg aaagtttggg    600
aactggaatt gtttgcatgg aactcagaat gtttcatact tttttcctta tagctttctc    660
tttatatgga taagtttgaa gaattccaga ctaccatggc aaaaagcaat gaactgttta    720
caaccttcag acaggaaatg gaaaaggtat ttacatattt ttagtagaat agtatatcaa    780
atggaatttg tataagctct tttaagtgtg attactattt tgctgagttt cctttgttat    840
gatactgtct tcattttctc tttagtgatc ctccagtggc atttttggtc attttgccct    900
caatgtaccc caagtagcta atgttctcta tgctcttaga attctacctt tattatagtg    960
aaatcctata ttaaatgcaa cttgttagaa ataaagtggt ggtttttttg gaaaaaaaaa   1020
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaactcga gggggggcccg tcccaattcc   1080
```

<210> 924
<211> 955
<212> DNA
<213> Homo sapiens

<400> 924
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ggcacgagtg aagtttgatg tcatacgtat catttcatta cattactttt tattgccaaa    60
taattcatta tatggatatg tcacatttta tttattcata agttgatgga aatttggatt   ·120
gtcccacttc ttggttatga atgttgctac actaaacatt tgtggacaca tttttgtgtg    180
gacatatgtt tttatttttc tggattatgt actcaggaat ggaattgctg ccttaatatg    240
gcaactctgt ttagcttttt gaggaactgc caaactgttt accaaagtgg ttgtaccatt    300
ttctgttttg ttcagcagta tataaagggt ccaatttctt cgcattttgg ctatcacttg    360
ttattacatg tctttctgat gatagtcatt gtagtgagtg tgaattattt cattatggct    420
ttgatttttc tcagatgact aatgatattg agcatctttt catatagttt ttgatcattt    480
acatatcttc tttggagaaa tgtctattca aatcctttgc ccatgtttta attgggttat    540
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cagatataat ttgcaaatat tttctcccat tcagagtgtt gtttttttcac ttcattgatc    660
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gagtgcagtg gcgtgatctt ggcttttgca acctccacct cctgggttaa agcaattccc    840
ctgcctcagc ctcccaagta gctgggactg caggtgtgtg ccactacacc tcgctaattt    900
ttgtatttct ttttttttag tagagatagg gttttgccat gttgtccagg ctggt        955
```

<210> 925
<211> 1164
<212> DNA
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<213> Homo sapiens

<400> 925
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ggcacgagca catgcgcccg ataggtcctt ctgagccttt ctgtggctgc acttggggac    60
ccttgtggac catggggtgt ggctagggaa cccctaagtt tcagactaaa ggaaagatcc   120
tgggtgatgc tggctttttg cttctttctt ctgccctccc acctcagctt gtaagcgggg   180
atgtgtgtat gtctggggag aggaggtgta gggtgcgtat gtccatgggg ggaggggctt   240
gtgtgtgcag tcattgtccc aaggtgtttc cagtagcgac ttctgtcccc ctatccccac   300
cctggtcccc actttgcgcc cccgggctcc ctgcctttgg tgcacacagg atcctgcccg   360
cccccttgc cagagccaga gaaggggggtt ggggccattc caaggaggca ggactgaaac   420
ccttaccagg gttactcccc aacatccttt tgcctgagtc accctctaag cgctttaacc   480
acgggcagct gcctgttccc cagacagttt ttggtggggg gggtccaggg tcccccttgc   540
tggtacctcc ctcaccctct ttttgttttt ccatctgtgc ctgttccttc cacagcccag   600
gcacacagaa gcccaccttc ttccccttag gaggagggat agtcaacacc cctgctgtct   660
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ggacccagcg ccctcttctc cccacaggct gtaaatagac ttccaatcac caggccagcc   780
cccacacacc ctcactcatt ccagggaagc ccaggtaggt ggtgaacccg ctgccacgtc   840
tatcagtcct cttgttttat gcaaagattt actgtaaagt agatttcttt ccctccctcc   900
gccattcttt tattgtaaat attgtctcta aatgtgtaac atattataaa gaatttataa   960
ggatttttaa agatgttttg ctcatttaca aaagtgttgt aacagtgttg gacaaagcct  1020
tccaccccat gtccgcatgg ctcctttcac tgtgtccttg acacacctct ctggcaacaa  1080
ctaaaatttc ctgcttctga aaagtcctgt cttaaaagta cagtctatat cttggaaata  1140
aatagctttc ctcaaaaaaa aaaa                                          1164
```

<210> 926
<211> 1929
<212> DNA
<213> Homo sapiens

<400> 926
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tcgagttttt tttttttttt ttttttttt ttagatgttg tctgtattta ttttctacct    60
ttatgaaaca agaacctgct aacaggtaaa tcgtaaagta acatatttt gccctgatgc    120
cattagtcac aatgccatgg ggtaactgct atgtgatttc ccatttgcaa ggaagcatat   180
taattcagtt tctgctcaat atacaattag gttgtaggga tatagatatc tcatttgagt   240
tatctgagtt tttcatcttt atatctaaaa atctaatctg aaaatagtaa aacacattta   300
aaaccttaga tgctactgta gtaaaagtta tgtttataaa catttcagta tattccttca   360
acttcaagaa tcttgaattt ccttgctaga aggctttttt cctcaaagat tccttttagg   420
cttactttgg tgttcaggat ctccaattat aaatgtagtc tctcagcacc acattccgta   480
aagatgattt cccaagtaac ggtatttgac taagttgctc cagagtgtta gggtgcaaac   540
cacagttagt aagctcctta tgaacaacct ccatatcaag tactttgtcc atttgcaggc   600
agatgttaaa tacagcagtt ggctcgtgtg gatacagtac tgcagagaaa gatccactct   660
gtgaagattt gagcagcatg gtcagtgaat gcagagaatg aggcatgata ggacctgtaa   720
tctccaaact aaaattggtct ctgtatccag aaagagcttg tgtcttcaca ttcacactcc   780
gtgccttaag catttgcatt gtggcacctc ggaaagcaac aggggacaag agggttggag   840
gaagtcctgc ctgtggacct gaggtagcaa ctaaactctt agagttaatc aaaaaattga   900
gcaatgtaaa ggtgttgatt ccttttacca acacaacaga ttcaggtctg tgatccattt   960
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cttgcacacc catctcttcc agccaggaaa aactttcctc ttcatcytca tcactgatgg  1080
cttgctccct aggaaattgc tacagttaga gtccctattt cacaagctgt tcctgtgcaa  1140
atctatttca tgagtccata agtcagtgga tgatataaag ttattttaat cacatactcc  1200
ccatatccca agcttgttcc agatgctgtc tccttcttat ggccactttc ttttattaaa  1260
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tatttaacag gcatgctgta cttttagagt gtaaaaaatt tgaaatgtta gtttttacaa  1380
atgatctatt aaggcagtag agttttcaag ctttcttcac aaacctacaa acatgcataa  1440
aacgtattct ccttgaaaga ggttcgggaa acaacacata catgtaacac tctttcataa  1500
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tcatgatcca ctaatgggtt tactcagttt gaaaattttg ttattaaagg ggtaattggt  1620
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cccctggact gtggactggt actggcctgt ggcctgttag aaaccgggct gcacagcagg  1800
aggtgagcga ctgtcgagtg aacattactg cctgagctcc atctcctgtc acatcagtgg  1860
```

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tcgcattaga ttctcacagg ggcacgaatc ctactgtgaa ctgtgcatgt gaggcctcgt   1920
gccgaattc                                                           1929
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<210> 927
<211> 1444
<212> DNA
<213> Homo sapiens

<400> 927
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tttttttttt tttttttttat aggtaaggaa ttctttttctt taaattaagt agaaaactac     60
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cttcatttcc tgcatgtgct tccactttgg gccccccttg tttctctgtc tccgcttctc    180
cctgtgccac atctgttcgc agtactggtc gaggctgaag tttgggctgc taagatttgg    240
atgtagtctt tgtatctcaa ccgtgactca gccaatagat ccttgacctg cccctcctca    300
tgctctgccc tctgggtatt ttccatctgt tcattctcaa tgacattcaa agtcagcttc    360
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aactcctctc gatgctcatc ccctgacctc tggatatacc atttaatagt tgctgttggg    540
gattaggtat acattccaga aaggtgagtt aaattcaatg ccaaaaatca cctttcatca    600
gcagtttcat gactaatgct gttcttggat gtccccagca ctgggtgatt gggtccccat    660
atttaacatc ttggcgtcta gctctccttt tagaagtagg agcatatcga gagcatgcat    720
ttccatccca ggcacagtag ggtctctggc aagacaacag tctgcgcaag ctttcccata    780
agtgtcgcat ctgtgcaagg agagctgaac caatccatct cgggaaccaa tgtacaattg    840
ttgctgcttc agagacaatt ccatgttcaa gatgattgat gagtgcttga atatctgcaa    900
ctcctccagc actacctctt ccatattcca ctttttcctttt gaaatgctga caactttgag  960
gacagttcca atgtctgttc caagaaacat tacatcgtac tggccatctt ctgcaatgac   1020
atgatccacc actatctgtg tcagtctgta atccacattg attctcttga acgttggtcc   1080
tcctgcaact gggtatacgg acttatacat cacagagtgc cgctttatga aactgatgac   1140
atcatctgga aaatctcggg tggacttaat cagtgggtca taggttttgc ttggacatgt   1200
accaggccgt ggataaggaa ttctcccatc atactgcacc caacgatggt ctgcactttc   1260
cttatgagca tatggaccat taaaaactgc tctgatgtca gccatgctat acacacaaac   1320
agcagagcct ttgaagatgg agctggttgt agtaaagact ccatatacta caggatttct   1380
ttcatctctt gtggggagta aataaatatc ttgaagctca tcaaagtaag tatctgctcg   1440
tgcc                                                               1444
```

<210> 928
<211> 878
<212> DNA
<213> Homo sapiens

<400> 928
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gaaggctgaa acgtgcatgt atataccagc ctctctgggc acactctctc tgcatggtag     60
ccagagcagg ttctggctgc tcttcaggct aatcgtctgg cacctggact ctggccacaa    120
catcctctga tgtgcagaat ccacttgaac atctgcaaaa aacttcaagg ggaggagttg    180
ttttttgttt ttttgttttt gtttgttttg ttttttttgcc actttacgaa ttggccacat    240
gataggttga ggtgagccga ggacacaaac cttacacagg taggcagcac taagctaaaa    300
tggattaaaa ataactaact caagcatgtc aaccaattag taaatagaag aattgtcagt    360
aaagcgtatt gaaagaatat catctaggat agcatttgat ttcaggctgg atgaaaaaat    420
aatcttcgaa ttttagagaa ttagaggaag ccttcaaaat tatgatgaaa tattcatgat    480
agtggtgatc atgatgggaa ctacaagtta ttgagggcat gtgccaggac ccttgctatg    540
cattacctcc gattcttttt gttttgtttt gttttttgttt ttgttttttgt tttgagatgg   600
agtctcagta ctttggaagg ctgatgcagg cacatcactt gaggtcagga gttcgagatc    660
agcctgacca acgtggtgaa accccgtctc tactaaaaat acaaaaatta gccaggcatg    720
gtggtgtgtg cctgtagccc cagctactca ggaggcttag gcaggagaat tgcttgaacc    780
caggaggcag aggttgctgt gagccaagat cgtgccactg cactttagcc tgggcaacag    840
agcaagactc catctcaaaa aaaaaaaaaa aaaaaaaa                            878
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<210> 929
<211> 793
<212> DNA
<213> Homo sapiens

<400> 929

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cggcacgagg acctgtccag cagcattctg gcccagagcc gtgagcgtgt cgccagcgcc    60
cgcgaggccc tggaccacat ggtggaatat gtggcccaga acacacctgt cacgtggctc   120
gtgggaccct ttgcccctgg aatcactgag aaagccccgg aggagaagaa gtaggggag   180
aggagaggac tcagcgggcc ccgtctctat aatgcagctg tgctctggag tcctcaaccc   240
ggggctcatt tcaaacttat tttctagcca ctcctcccag ctcttctgtg ctgtccactt   300
gggaagctaa ggctctcaaa acgggcatca cccagttgac ccatctctca gcctctctga   360
gcttggaaga agcctgttct gagcctcacc ctatcagtca gtagagagag atgtcccaga   420
aaaaatatct ttcaggaaag ttctcccctg cagaattttt tttccttgtt aaatatcagg   480
aatatagccc gggtgcggtg gctcacacct gtaatcccag cactttggga ggctgaggcg   540
ggcggaacac ctgaggtcag gtgttcgaga ccagccaggc caacatggtg aaaccccgtc   600
tctactaaaa atacaaaaaa aaatgagccg ggcatggtag caggtgtctg ttatcccagt   660
taggaggctg aggcaagaga atctcttgaa cctgagaggc ggaggttgca gtgagccaag   720
atcgcgccat tgcactccag cctgggggac aagagtgaga cttagtctca aaaaaaaaa    780
aaaaaaaaaa aaa                                                        793
```

<210> 930
<211> 1441
<212> DNA
<213> Homo sapiens

<400> 930

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ggcacgagct tcagaaaatt aatcacatac aatgtatgtg tcctcttttg accttggaaa    60
tctgtatgtg gtggagaagt atttgaatgc atttaggctt aatttcttcg ccttccacat   120
gttaacagta gagctctatg cactccggct gcaattgtat ggctttctct aacccctgca   180
gtcacttcca gatgcctgtg cttacagcat tgtggaatca tgttggaagc tccacatgtc   240
catggaagtt tgtgatgtac ggccgaccct acaggcagtt aacatgcatg ggctggtttg   300
tttcttgggg ttttctgtta gtttgtcttg ttttgctttc cagagatctt gctcatacca   360
aggaatcacg caaccactaa agctatccag ttaagtgcag gtagttcccc tggaggaaat   420
aatattttca aactgtcgtt ggtgtgatac tttggctcaa aggatctttg cttttccatt   480
taagcttctg tttgagtttt gccctggggc ttgaatgaat cccagagagt cgttcggatg   540
gtgggaggct gcctaggagg cagtaaatcc agtcacagtg cctgggaggg gcccatcctt   600
ccaaaatgta aatccagtcg cggtgtgacc gagctggcta acaggcttgt ctgcctggtt   660
ttcctcctac acgtggacat tattctcctg atcctcctac ctggtccacc ccagggctac   720
cggaaggtaa aatcttcacc tgaaccaatt atgagcagtc tccttactga aggtacagcc   780
ggatacgtgg tgcccccggg gctggtgttg gcagccgggg ggaggtgcct gagggtcccc   840
acggttcctt tctgcttttc tgaatgcatc aagggtacga gaacttgcca atgggaaatt   900
catccgagtg gcaatggcag agaaggatag gagtggaatg cccacacagt gaccaacaga   960
actggtctgc gtgcataacc agctgccacc ctcaggcctg ggccccagag ctcagggcac  1020
ccagttctta aggaaccatt tggaggacag tctgagagca ggaacttcaa gctgtgattc  1080
tatctcggct cagacttttg gttggaaaaa gatcttcatg gccccaaatc ccctgagaca  1140
tgccttgtag aatgattttg tgatgttgtg atgcttgtgg agcatcgcgt aaggcttctt  1200
gcttatttaa actgtgcaag gtaaaaatca agcctttgga gccacagaac cagctcaagt  1260
acatgccaat gttgtttaag aaacagttat gatcctaaac tttttggata atcttttata  1320
tttctgacct ttgaatttaa tcattgttct tagattaaaa taaaatatgc tattgaaact  1380
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  1440
a                                                                    1441
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<210> 931
<211> 626
<212> DNA
<213> Homo sapiens

<400> 931

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ggcacgagtt ccttccccac cagggaggac aacatcttca tgctgtgatt gaagcatcca    60
ttcagaacac gaggcaatat tgtagtccac agggaatgga tgcttcactt gatctccgga   120
ccttggctgc agaggccatc gcagcttttg aaaagtgaag gggttaattc ccattggtgt   180
ctttgcttat agcattttc tctaacctat aacaaggaga cattacattt tactttagaa   240
catgagaata gcagttttgc tcatgactta ccattccagc tgcatgggaa agcaaagcag   300
aaaacagtgc cccaaatgga aaaagatac tcacacagaa caaaacagtt cttggtcttg   360
```

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ttcttggtct tgtcaaacct tgcctgatgc tctttctaaa gtcaaaatat gaatgctaag    420
aaggcataac ctacatcctt ctctgatttc ttcagcaggg tcaaaagaca gttactagca    480
atggggaatg cttgtcactg tggagaaaga gttttgtata tgtctgatac cgttgttata    540
acaaaacaaa tttttttact atagtttttt gttttctacc tgcacgacaa cacataaaaa    600
aaaaaaaaaa aaaaaaaaaa aaaaaa                                          626


<210> 932
<211> 518
<212> DNA
<213> Homo sapiens

<400> 932
ggcacgagca acaatggcac cccagtcgtg gccaccacat actcggtttc tgctcagagc     60
tcgatgtcaa gcagacagat gactgaagac ttcctgtaag agaaatggaa attggaaact    120
agactgaagt gcaaatcttc cctctcaccc tggctctttc cacttctcac aggcctcctc    180
tttcaaataa ggcatggtgg gcagcaaaga aagggtgtat tgataatgtt gctgtttggt    240
gttaagtgat ggggcttttt cttctgtttt tattgagggt gggggttggg tgtgtaattt    300
gtaagtactt ttgtgcatga tctgtccctc cctcttccca cccctgcagt cctctgaaga    360
gaggccaaca gccttcccct gccttggatt ctgaagtgtt cctgtttgtc ttatcctggc    420
cctggccaga cgttttcttt gatttttaat tttttttttt tattaaaaga taccagtatg    480
agatgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa                            518


<210> 933
<211> 1830
<212> DNA
<213> Homo sapiens

<400> 933
ggcacgaggt cacccagact ggagtgcagt ggcgcgatct tggctcacag caacctccgt     60
agattctcaa tccaaagtcc taaccaccca gatatgatac aaaacatttt gttcttaagt    120
gcattttct ggggagaggg tcctatcatc cccacccttc cgcacacagt taagagctgc    180
cctctatggg agccaggctc tttcccacag aatgtcagca ggagcttgga agatgatccg    240
agctccaccc cacatgcctg ctctatggga cagtgcccac agctgccagc cttccccctt    300
accatggagc caggcacacc aggcaagcca ggggctcccc gaaggccccg gagctccagg    360
gtggcctctc tctcctgcag ggccggtgg cccaacaggc cccatggaac cactcttgcc    420
aggtccacca ggcatgccgg ctctcccctt ctctcctgcc tggcccttct gtcctgcagc    480
tcctggatca ccctacaaag atagatactt agtgctgtca aatttacatc atgatgtctc    540
accaatctgc tcttttctct ccaccctccc accaagcccc cagcgtctcc ctctagactg    600
tggccacagc atcctgacag gtcactccac ctcactgccc cagaatggtc cttctagaag    660
acagttctcc tggtgttact ccctgcttag aaattctgat ggctcccaaa tgtcctcagg    720
ataaagcact cattcgttgg ccgggcatgc aaggccattc attatgtggt cctgatcgtt    780
ccttcctcag cctcctctcc ccaccctctg cctcccacca gacctcactg gtgatgattc    840
tctgattctg ccatgttgtt atggtcctga atgcccttcc cctcatctct ctctatccag    900
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gggttgggtg ctcctccctc tcatcccaca gcgctatgtc tcatgtcttc tggaaaactt   1020
gccaatccct agtgtaagtg tgactggtct attgtgagca cctattgttc agggacctct   1080
gtttacctga ggccaggaca agggcctgga atgtgagcag gagcaaggga gtgctcggga   1140
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tccccccaac cacagctaat gaccccatgt gagaaatttt cagacactat cctgctccaa   1260
gttctgcatt tttgcccccct gcccactggc cttcctgtgt ctcctctctg tggctaaagc   1320
cgtaacttgc agctgggctt catccactcg tgagcttctc ctctcaagcc cagccagtgc   1380
ccactcacct tgggaccagg aggtccatag aatccctgct ttccaggggg tccctagagg   1440
aaagcaaaag tcagaggtga agtccgggca gcatctctga ggctccctgg ggaggcaggt   1500
gcagtgaaga ggccccttcc acagcctgag gcccccaggt gtgtccagcc cggctctgtg   1560
tgagaaagga gcgcagcctc cctgcccagc tggaagggaa aataatgtcc tctggggcat   1620
ggccttgttt aagcatgttg gctgggcccc catcacagat gaagagaggc gagaagtcag   1680
aatgagaggg ccagtctgtg gcatactggg gggccctgga aagactggta cccaggagat   1740
gtttgtttgg aatttattat tatcattatt attgttgttg ttgttgtttc tttttgacca   1800
ggtacagggt ttaaaaaaaa aaaaaaaaaa                                    1830


<210> 934
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549

<211> 1022
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (476)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1010)
<223> n equals a,t,g, or c

<400> 934
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gattgtaaga ttgtgaagat atataaaatt gatgaattaa gagaaattat gccactttcc      60
tatagtttct gtgttctgtt tattgtatgg tgtattcact cttggaaaat atgtaatagt     120
tgtgtatcca gaatatgtgt cttcacctga atatttaatc tttatattta caaaaaaata     180
agttccacaa gatggacaaa aatggtccat gatatttagc ttaaattgta accttttgtt     240
gtgtatataa aacttccttg gaagaaaata accttattgt tttcttaaag ctaaacagaa     300
taggattggt actcattaat tatgtcttgc aaatattttc taaaaattca accactctcc     360
taaaatggtg tttaaatatt ttgtagggca gaatatgcat attgcctgtt agcaagtaat     420
aattcattct catagagaaa tgggtttta cccatggaag taatctttt tttttntttt       480
twtttttatt ttttttttat tattatactt taagttttag ggtacatgtg cacawtgtgc     540
aggttagtta catatgtata catgtgccat gctggtgygc tgcacccayt aactcgtcat     600
ytagcattag gtatatctcc yaatgctatc cctccccct ccccccaccc cacaacagtc      660
cccagagtgt gatrttcccc ttcctgtgtc catgtgwtct cattgttcaa ttcccaccta     720
tgagtgagaa yatgcggtgt ttggttttt gtycttgcga tagtttrctg agaatgatgr      780
tttccarytt catccatgtc cctacaaagg acatgaactc atcattttt atggctgcat       840
agtattccat ggtgtatatg tgccacattt tcttaatcca gtctatcatt gttggacatt     900
tgggttggtt ccaagtcttt gctattgtga atartgccrc aataaacata cgtgtgcatg     960
tgtctttawa aaaaaaaaa aaaaacccgg ggggggccc gtaccattgn cttagggggg      1020
gg                                                                  1022
```

<210> 935
<211> 1077
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (476)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (490)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1036)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1040)
<223> n equals a,t,g, or c

<220>
<221> SITE

<222> (1052)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1062)
<223> n equals a,t,g, or c

<400> 935
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gattgtaaga ttgtgaagat atataaaatt gatgaattaa gagaaattat gccactttcc      60
tatagtttct gtgttctgtt tattgtatgg tgtattcact cttggaaaat atgtaatagt     120
tgtgtatcca gaatatgtgt cttcacctga atatttaatc tttatattta caaaaaaata     180
agttccacaa gatggacaaa aatggtccat gatatttagc ttaaattgta accttttgtt     240
gtgtatataa aacttccttg gaagaaaata accttattgt tttcttaaag ctaaacagaa     300
taggattggt actcattaat tatgtcttgc aaatattttc taaaaattca accactctcc     360
taaaatggtg tttaaatatt ttgtagggca gaatatgcat attgcctgtt agcaagtaat     420
aattcattct catagagaaa tgggtttta cccatggaag taatctttt ttttntttt     480
ttttttttan ttttttttt wttattatac tttaagtttt agggtacatg tgcacawtgt     540
gcaggttagt tacatatgta tacatgtgcc atgctggtgy gctgcaccca ytaactcgtc     600
atytagcatt aggtatatct ccyaatgcta tccctccccc ctcccccac cccacaacag     660
tccccagagt gtgatrttcc ccttcctgtg tccatgtgwt ctcattgttc aattcccacc     720
tatgagtgag aayatgcggt gtttggtttt ttgtycttgc gatagtttrc tgagaatgat     780
grtttccary ttcatccatg tccctacaaa ggacatgaac tcatcatttt ttatggctgc     840
atagtattcc atggtgtata tgtgccacat tttcttaatc cagtctatca ttgttggaca     900
tttgggttgg ttccaagtct ttgctattgt gaatartgcc rcaataaaca tacgtgtgca     960
tgtgtcttta waaaaaaaa aaaaaaaaa aaaaactcg agggggggcc ccgggacccc    1020
aatttcgcct ataggngagn cctattacaa tncactggcc gncgttttac aacgccg      1077
```

<210> 936
<211> 1077
<212> DNA
<213> Homo sapiens

<400> 936
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caacaatggg cccacgacca agaccctggg tgttcagacc ccaaggccag ggctttcccg      60
ctgcatcaag atgccaatcc ctttgtgggc ttcaccagtg cccaagtctc tatggagaat     120
gagaactgga agccactgct accgtctacc cagcaccagt agtgccgatg tgccacactg     180
cccagttgag gcccctcacg ctctgtgccc ctagatcctt caggtcccca ccctcagctg     240
tcaccaccac cctccccagg ggactccatc tgagatgagg cctcgtcctc ctggaagctg     300
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aatgaccaca gccactcgca tccgtatagc actttaaagt ttctgcagtc ctttgacaca     480
taggatctca tggagcctca cgtctactcc cttctgcaga tgaggaaacc gagagaagtg     540
gcccaaggtc acgcaactct gagatgccac atttcatttg atcttgtaca cattttcttt     600
tattccttct tttttcctcc tttcatttcc cactacgcac aaagagttta taaacactgt     660
tctcagaaga gtcacagttt ggggtgagat ctggaaatca agaaatgggt gtccactctt     720
ttctttcatt agctaggatc tactagatgc attatactcc atacctgctt ttcccatggc     780
cgccctacgg aaaatcccat ccacagaggc cagggctacc caagcccctc caggtgagct     840
gggcctttcc tttatgaacc tccatcctcc cagccagcta cagtagggcc tcctcacccc     900
gtaccccaca gctagacagt gtcagcactc atctcctcct cccacatttc tggagctttt     960
ttttttcctt ccccattgac ctttgtggtc ttctgtgatt atttatgctg cctcccaagg    1020
atagaattga aataaaatgt tttcaactta tcaaaaaaa aaaaaaaaa actcgag      1077
```

<210> 937
<211> 1309
<212> DNA
<213> Homo sapiens

<400> 937
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ggcacgagag gtcgtaaggc actgggcaaa aacttttcca agaaagttca tggtgcacac      60
gctgacctaa acactggccg acattcccaa ggttttttc attatggaag tgcatggcca     120
```

551

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ttgcatggta tccagaaaac aaagaccaga gaagccagac tttataccac catctggaaa     180
catttaattt gtgctttagg taagtgttag caaatattta ggatgattga tcaaatcatt     240
agtgtgttta tgagtgcatg gtgtaatttt tactaaagct cacatttctt caggaactcg     300
attcaactcc tttacattcc tggttatttt catttacttg atcttgaggt ctcatctggc     360
agagctgtgc aagctgggac ctttgtggct cattttgagg agctgtttac tttacctgtt     420
gatgggaact tgcaggtggg aggcagccag tcttaaagag taccttgtta gcaagtgtgg     480
aagagagtcc acgcagacag acttgcccta tgtggtgtcc cctctgccag cccagccctt     540
gggcacattg gcacctacct gaacccgagc cccctcatgc acacagggag ccgcacctcc     600
ctcacacgct cctcaccagt gtgacatggt gtgacgtgct ctgtgggtcc acaacgggcc     660
cactccacag ctctgtgcac agcatgctgg gtcagggtgg tgctagatta ataagatgag     720
ggtgaatgtc aaaactgagc actttgagta ctgtgggcac actgtcacag ggtttaccca     780
ggaaggaaca acccctgggc tccagaagca ggttgaccag gccagtctga gttgtagcat     840
tgagactcat ctagcggaag tcaatgagga aggaaaactg gctgagaaca gctgttgttt     900
cagttaaaat ctcagaatga tgcattgaat tcaaagttac aacacagcaa aatagtatat     960
gtattttttt aaacctcaaa aatactgtat tattaacttt aaaacatttt tggctggtgt    1020
ggtggctcac acctgtaatc ccagcacttt gggaggctga ggcaggcaga tcacgaggtc    1080
aggagattga gatcatcctg gctaatgtgg taaaaccccg tctctactaa aaatacaaaa    1140
aattagccag gtgtggtggt ggccgcctgt agtctcagct actcgggagg ctgaggcagg    1200
agaatggcat gaacctggga ggcggagctt gcagtgagcc aagatggcgc cactgcactc    1260
cagcctgggc aacagagcga gactccgtct aaaaaaaaaa aaaaaaaaa               1309

<210> 938
<211> 910
<212> DNA
<213> Homo sapiens

<400> 938
ggcacgaggc tctgggcatg gtgctccctg tcatctgctg ggtagaggtg ctctgggcac      60
agtgctccct gagtctgctg gacacaggtg ctctgggcac ggtgctccct gagtctgctg     120
ggtagaggtg ctctgggcac ggtgctccct gcttctgctg ggtagcggtg ctctgggcac     180
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ggcacaggtg ctcctggcgc tgtgttgtgg gatatgtaca tccccagcca tttgctgtcc     300
ttgggcaact tagcaatgtg cgatggtatt gttactttat tttttagaag ggacaagaaa     360
cacagaggtg agacatagaa aaggaaaacg gatctattta aaccttctct tgtgccccca     420
tgggaatgtc aggcactgca tctgcaggtg gcattggtgt ggactcctgt cgacacgcaa     480
tgtactgtct gtccatcagc aggtctctct tgtgaattcc tcctaacccc gccttaagga     540
taaaaacgat tcctctgtgg gaataatcat cttagtttgt ttaagctgat ataagaaaaa     600
atccagcagt ccgggtgtgg tgctcacgcc tgtcatccca gcactttggg aggctgaggc     660
aggtagatca cgaggtcagg agatcgagac catcctgacc aacatggtga agccccgtct     720
ctattaaaaa tacaaaatta gccaggcgtg gtggtggacg cctgtaatcc cagctactcg     780
ggaggctgag gcaggagagt cgcttgaacc cgggaggcgg aggttgtggt gagccaagat     840
cacgccactg cactccagcc ggagtaacaa cagcaaaatt ccgtctcaaa aaaaaaaaa     900
aaaaaaaaaa                                                           910

<210> 939
<211> 2894
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (103)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2876)
<223> n equals a,t,g, or c

<400> 939
atgctgatgt tcactgagtg tgtgctggac ctgacagcca tgaggggagg aaaccctgag      60
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ctgtgcacat ctgctgtgtc cttgtaccag atccaggaga gtntggtggt ggaccagatc    120
agtcagctga gcaaagactg ggggcgggtg gagcagctgg tgttgtacat gaaagcagca    180
cagctcttgc ggcttctctg catcttgcca aagcccagat caagtccggg aaactgagcc    240
catccacagc tgtgaaacaa gttgtcaaga atctgaacga acgatataaa ttctgcatca    300
ccatgtgcaa gaaacttaca gaaaagctga atcgattctt ctctgacaaa cagaggttta    360
ttgatgaaat caacagtgtg actgcagaga aactcatcta taattgtgct gtagaaatgg    420
ttcagtctgc agccctggat gagatgtttc agcagaccga agatattgtt tatcgctatc    480
ataaggcagc ccttcttttg gaaggcctaa gtaggattct acaggaccct gcagatattg    540
aaaatgtgca taaatataaa tgtagtattg agagaagact gtcggcgctc tgccatagca    600
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cctttgggat tacagcttga gttctgtcac cccatcccca ggaaactgta gcttcttaac    720
tggtgactac caaagaacaa gcagtgattt gaaaaaggaa aaacaatcca aaaactacat    780
atttgtagga aatctgcctt attggagaaa atcacccttt cccttttttct ttgtagaagc    840
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gataatcggt acagttattc ttaaagataa ttaaaaatga aacaaagtga gtgctcgtca    960
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tattcacccc tcatccaggc agtttgatat ttggagtaag tttgtttaaa tctgagcatg   1080
catctttaaa cagctcagga agaaatagct taagaagaag tgaaacatgg atcttggaag   1140
aaatttttgaa atcttcaatt tgatcctaat atggatacat gttaatcttc caaaatcttt   1200
catattgcac taatttatta aaacaactgt gtattggatt ttgtaattta actaaggcac   1260
aatggacttg tttaaaatat tttacttgat tgtatacata gacccttttcc agaattcaca   1320
tgtaatctcc agtgaacttt taagtggtta aaacttgtat tcatgtgaac ctttgcacat   1380
ttttttttttt ttacttcttt atctacacct acagatttttc tcagtaatgt ttttgktagc   1440
ttttggttcc atttttttatt gtgcatgcag aatgtacatt gatgcctgtg accttaggtt   1500
tattaaaggc taggtttatt tgggcagtat tagaaacaaa atcatggatc aagagatact   1560
cttgataatt tgaatagggc caaaacaaag ttggtgacct aaaggcttgt tagtgatgtg   1620
gagttcctac atgcagtgag tggaaaatga agttcgtttt ctcttaggaa aatgggcagc   1680
tgtcttctgc ctaatgtgta ttttttcatgt taattctgac agttcaccaa atagctagtc   1740
atggagaatg caggcagtta acttaatatc cctccaggaa tggttcctac gttgtgtatt   1800
atttggtttc ttttacttac ctgcttgaat acttgaataa accattcacc aattttaatc   1860
cttttatttt aatccttttta cataaaataa tctgaactct ttgacaaatt gcacagagct   1920
ctttggcatt aatctaattt taatgtactg ataaaaacaa acatggttgt cctttacttt   1980
gacaaagtaa tgtaattttt accttatttta tctgtatgaa attccagtag ttaatttgaa   2040
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tgtaactgca tgcattattc ttgaaactag gtaaaactca ctgaattgtt gtgtaatagc   2160
cttttttatta ttgcctgtac aaatgtatat taaggtaaaa taaaactgac aaagtgtttc   2220
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tagagacttg gccatgaata tcctttgtcc tgccccagga tttagatctt ggctactgtc   2340
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actttatttt atataatatt ttttattcac agtgaaattt cattcatgtt ctttcagtta   2460
tcacctgtgt tatctcagtt gtaggtttat tctatcctct cctcttcctc tcccatttct   2520
ttttaacac aggatgaaac aggttcagag aggggaagtg attggcctaa agtcaggaac   2580
taggcaagtg gtcaagccat gcttgtgac tttcaagtta attcttcttg ttcttgtata   2640
ttaaaggtct tggggtagat ggtgtgtgtg aaacagtgaa gtctcaacag cagaaaagaa   2700
caaaatgtaa attcatgaat aatggttctg gttatacttc cattatcaag gctaattaag   2760
agattttgcc ttgagtatag caataataaa caaatattcg gcacgagcgg cacgaggggg   2820
ggcccggtac ccaattcgcc ctatagtgag tcgtattaca attcactggc cgtcgnttta   2880
caacgtcgtg actg                                                      2894

<210> 940
<211> 837
<212> DNA
<213> Homo sapiens

<400> 940
cggcacgagc ctaacaccca gtaggtgctc actaaatgat gttccttatt attatggtga     60
ttaccactgt actcttttca gatgaaagtg ttcggtcacc tggaacctgt gagtatgtgg    120
tttttgatct gtgactaaac tgttcaccca tttcccagtt tctctgctct gtcaaatatc    180
aacattttac caggtttctc tgttgttgcc aaacctgtca tttttatttg gtgtggcttc    240
ttgggaaact tccatggccc atttgatggg aatcaaacag tgaaaacaag gacagatgca    300
gcagaggtgg catcaggaac aaatgggtca taagaactta ccttggcagc agccccagaa    360
```

553

```
tggtcaggag gaaaggcact ttaaggtatc agaaggtaga aaggagaggt tggatgatag    420
aatgggggaag ggattcctcc tcgtgttcac agaagtgaat caatgggaga cacaaggtta    480
ccacttaata ttcctgctct cctaggcatg ggtcaggtac atcttcagcc atgggtaagt    540
ttgttcaaca aatgagtgat ctttgggagg ctgaggcggg cggatcacga ggtcaggaga    600
ttgagaccat cctggctaac acgatgaaac cccgtctcta ctaaaaatac aaaaattagc    660
cgggtgtggt ggcgggcgcc tgtagtccca gctactcggg aggctggggc aggagaatgt    720
cgtgaacctg ggaggcagag cttgctgtaa gcagagatcg tgccactgca ctccagcctg    780
ggcgacagag cgagactgca tcccaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa      837
```

```
<210> 941
<211> 1377
<212> DNA
<213> Homo sapiens
```

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<400> 941
gcacgaggaa atcagaaaca agacaattat ttgcagtgct gtcaaacaag ccagaaggag     60
aaaatcaagg tagaatgccc cactttccag ttgccttagg atagcaggct gcagcctcag    120
acttgatcct gtcattctcc tctgtctccc acatctgaat tgataattgc tgcaaaatgt    180
cattagccta cacttcatcc atcagggctc ttggattctt acaccacgac ttgctgtgca    240
aggtgtttat tgcatcttca aagtgaaact ttaaattatt attcaaacat ttattttcct    300
tttgttttaa aaagagtccc tacaatgatc acttctaaga ttttttttta ccttcccctc    360
tgcagcacac acagctattc aacaatgatt tctaaaattc atatttcaaa tttgtatctc    420
tccattttga aacattatag aaagcatggg atgcttgaga caaatctggt ttctcctttg    480
aagtagctgt tgacaaccta ctctcttgaa aagttagata taattcttaa tcatgtttag    540
tggaaatttg tttacctgtc catctgtttt gctgtttcat tgtaaggaag atgagaagtg    600
ttggaacagc ttccctcccc taaaggtatt ctagcagagg cgagacagca acttggcggg    660
catgttgcat aggagttaag taccagatgg ggaattgccc atgtgatggt gaagagtctc    720
tcacattgat tttcttcctt ttctcctctt ctctcctcct tctcttctct cctctttctc    780
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tttctctctc ttcctttttc tcttcctctt tctctttctc tttctctttc tcttctcttc    900
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ctccctccct ccctccctcc tccctttttc tttttctttc ttttttttttg tttggcaga  1020
gtcttgctct gttgcccagg ctgcagtgca gtggtgtgat ctcggctcac tgcaacctcc  1080
acctcccggg ttcaagcaat tctcttgcct cagcttctcc agttactggg actacaggtg  1140
cataccacca tgcccggcta atttttgtat ttttagtaga ggcggggttt tgtcatgttg  1200
gccaggctga tctcaaactc ctgacctcag gtgatccgcc tgcctcagcc ttccaaagtg  1260
ctgagattac aggcatgagc cgctgtaccc ggcctgattt tctatgattc tgcctttaaa  1320
agacagcacg tataccaagc ctttttcaga aagcttttct cttaactcct tctaatg      1377
```

```
<210> 942
<211> 1319
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (65)
<223> n equals a,t,g, or c
```

```
<220>
<221> SITE
<222> (1298)
<223> n equals a,t,g, or c
```

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<220>
<221> SITE
<222> (1302)
<223> n equals a,t,g, or c
```

```
<220>
<221> SITE
```

<220>
<221> SITE
<222> (1305)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1319)
<223> n equals a,t,g, or c

<400> 942

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tgccgaaggc ttgtggcctg accgtgtgtc cccctgcaga tgagcatccc actgctcctc      60
caggncaagg tggccctcgt ggagcgctat gtggccggct tcccggacct ccagaggagg     120
ctgctggtcc tcatggattc ctggtgccag cccggctttg acatcaagga cgttgccagg     180
tgagtcccgt ggggcgctgg cagctggcac cagatggcat cctgggagcc ctggttaggg     240
aagggagtgt agggggggcag caggcgcgtg ggagagctct ccccaggaag ttctggtgtt     300
tgggtcacag ctgccatgtg actgcagctg gagcagctgc ctctggagag gagcggctgg     360
ggctggcagg agcacagccc tcttctcccg agtgaaaaga gttaactgct cttagaagaa     420
cgaaataat tctccgtggt ggctcttctc atgcaggcat ggcaaccgta ctgctttctt     480
gttcatccat tcctttgttc tttcatctaa taaagttttt ggaagcactt ggtgtgtgac     540
gtctgtcagc aattacagag aaaaggcagc acctgacaag gagcccatat ggtgcctgta     600
tggattcagg gaagccatgt gcatgtgtgt gcatgtgtgt gcatgtatgt gtgtgcccat     660
gtgcatgtgt gcctgcaggt gyscatgtgt gtgtctctgt gtgtgcacgt gatatgtgcg     720
tgtgtgcacg tttgtgtgtg cctgtaggtg tgcatgtgtg tgcatgtatg tgtgtgcctg     780
caggtgtgtg tgtgtgcatg tatatctgtg tgtgcattgt gttcgtttgt gcaggtgtgt     840
atgtctgcgt gcatatgatg tgtacatgtg tgtgcctgca ggtgtacgtg tgttttcgtg     900
catgtggtgt gtgtgtrcat gtatgtgtgt gcctgtaggt gtgtgtttgt atgtgtgtgt     960
gcatgggtgt gtacgtgtgt gcatgtgtgc ctgtgcatgt gtgtgcgtgt ggtgtgtgta    1020
catgtatgtg tgtgcacgtg tgtgtgcctg caggtgtgcg tgtgtgtgca tgtgtgtgcg    1080
tgtgtacctg tgtgtgcact gtgttcatgt ttgtgcaggt ctgtgtgtgc atgcatgtgt    1140
gtgtacgtgt gtgtgcctgc aggtgtgcat gttgtgtgtgt gtgagatatg agggatgaca    1200
tctgggaggg gaggggcttc ctgctctata tctggtcaag gtgccccgag agtgaagcaa    1260
gctgaaaggt ctgtgaaggc tccagggccc ggccactngc cnganaatcc cggcgagcn    1319
```

<210> 943
<211> 2014
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (70)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1324)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1520)
<223> n equals a,t,g, or c

<400> 943

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gaagcgggan aggaactcaa agcagccgct gatggcgtac tatctgaagt gaggaaaaaa     120
caagcagata ccaaaagaat ggtggacatt ctacgggctt tggagaaatt gaggaaactg     180
aggaaagagg ctgcagcgag gaaaggggtc tgtcctccag cctcagcaga tgagactttt     240
acgcatcatc ttcagcgact gagaaaactc attaaaaagc gctctgaact gtatgaagct     300
gaagagagag ccctcagagt tatgctagaa ggagaacaag aggaagagag gaaaagagaa     360
ttagaaaaga aacaaagaaa agaaaaagag aaaattttac ttcagaaacg tgaaattgag     420
tccaagttgt ttggggatcc agatgagttc ccacttgctc acctcttgga gcctttccga     480
```

555

```
cagtattatc tccaagccga gcactccctg ccagcgctca tccagatcag gcatgattgg    540
gatcagtacc tggtgcatcc gatcatccca aaggcaactt cgttccccaa ggatgggtcc    600
ttcccccgct ccccagcaac gacatctggg caactgctgt taagctgcat tagtaaagat    660
gctccaggag tgtggtccag ccagcgctct ttccagctgt aaatattagc gatggtgcca    720
tcttttgctg tagactaaac tgcaacttct aaattccatg tggcattccc ctaccctgaa    780
gttatgcttt ccttctgtgc tctgtgctgg ccagaggtgc ctcttgaatc agattaatgt    840
ggttttttcag gaaaggactt aggtgaactg aggtttttac cacaggcagt gaatgacctt    900
ggttcaccaa atttgcctct gttttgaggg gcttggtcca gagtgacttg ttaatttact    960
ctaacttcct tgtgtgttga tgggtaagta cactcaaaca ctgaatacag gtgtgtgatg   1020
ggtagatttc acagcccttc tactaatagt gagtgtgaag gcaagcttga tgcaaaacct   1080
cctgamcttt cctacctgaa gagcccttg acttctagga agaaaggtca aaaatgttat   1140
cttcagttgt gttaatccca gttttagtgc agcttaggag gctgctagtt aggaagatgg   1200
cagtggctgt aggctgggtt gccagaaaag atggtggcct agtcttatta ttcagatgga   1260
gaacttagaa aacctgaaga gtacccaaat tggattgtat tttaatggac aatggctgta   1320
tttnttccat gttagaagga tcctaatgaa agcacctgtt attttaagt ttctaagggt   1380
ctagttgttc agaatcccca aggatatttc cctaacctca ctcagtcaca ttgtaggagc   1440
cagtgtagct atggaattat cttaggaact caagcttcta aaactatcca tgtagtcaaa   1500
tctagggggaa aaagcaaatn aaaatagtaa aatttggccg ggcacagtgc tcacgcctgt   1560
aatcccaaca ctttgggagg ccgaggcggg ccgatcacga ggtcaggaga tcaaggccat   1620
cctggctaac acggtgaaac cctgtctcta ctaaaaatac aaaaaaatat tagctgggcg   1680
taggtggtgc acacctgtag tcccagctac tggggaggct gaggcaggag aatggtgtaa   1740
aacccaggag gcagagcttg cagtgagccg agatcgcgcc acggcactcc agcctgggag   1800
acagagcaag actccgtctc aaaaaaaaaa aaaagtaaaa tttatttttt atattcatta   1860
ataaatgctg ttgtgcttgg agatgatcac tcatataaca tgtcattttt ttggttctgt   1920
tttggtttgg tttttgccaa ttattttgtt atatttccaa aaaactaaat aaaaatcatt   1980
tttattttt aaaaaaaaaa aaaaaaaaa aaac                                  2014
                                                                     2014
```

<210> 944
<211> 1200
<212> DNA
<213> Homo sapiens

<400> 944
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gatgaaatgt agcttattgt tttcagctag tttaaattgg tcttgagaca aatggaaatt     60
tgtttcttaa ttacaggctc tagatgactt tatagaacat ctctgggcta ttatcaagta    120
cttgcttaag aaggacaatt ccacttgaat tatatatttt ataccccaaa ggaaaataag    180
tttaaattta attttaacca gatgatgcca tctgcatgga gtcactctgt tgtcgtgtcc    240
acacgtccag gatatgttta atgaatggtg tttgtttact ttattggtct tagccaaatg    300
agtaaagacc tggagactgg gcaatttgag aagacattta ggaatccctg gcttttctct    360
gttgatgcca ccatataagc taaggatgac agtgggtagg gaatgtgtgt ggaattcctg    420
tgtgattcac tgtaactgtg gtgtgctaaa tgcatggtta agctagygtm agcatcstct    480
tcctgtaagt taaagatccc ttctgtgagc aggactcctg cgtactcatg tatatttga    540
aatatgcttt acaggatatt ttaggactta ataaagatg actgatgtgt aaggggactt    600
aaaaggaaga aaaacccctt cttctgtagg gtagcatatt tgggattata attttcattt    660
tctttaggtt ggtttcatwt aacttttttt ttttttttt tgagtcaggg tcgtgctctg    720
tcgcccaggc tgtagtgcat ggcacgatct cggctcatgc aattccgcct cccaggagaa    780
ttgcttgaac ccaggaggca gaggttgcag tgagccgaga tcatgccatt gcaccccgac    840
tctgggcaac agagccagac tctgtctcgg gggaaacaaa aaaaaagtgt gctttgtcaa    900
gagaagcacc agcagacctc taagaactgc tctctaaggc tgcggtagca aattatctac    960
tattgcaggt gccttattgg tagagggctc tgaagagcca aaactgtata tgcaacactt   1020
gtaagataaa agggacttta ataatcaaga ttttcttgaa gatttgttag aaataatgtc   1080
ttatttctgg taacctttcc cttttttgtat ttataactct actaaccaaa ttacctatca   1140
ataaaccatt actataatat tttaaaacaa aaaaaaaaaa aaaaaaaaaa aaactcgtag   1200
```

<210> 945
<211> 1295
<212> DNA
<213> Homo sapiens

<400> 945
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tatgaattta tacactgagt cttgtcttgt gtcctctttt cctagcaaac aatatggcat     60
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556

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ctaaaaccca gttctactct gaataatttt ttctttacaa gatgctacag tatgatacac      120
catgcccacc tggagagagg ataaaggtga tggtggtagg acagaatttc catccgcaat      180
ctccgttttg agcaaagaag catggaggat ggaagtcatt gctgggaccc cggagtagag      240
tggtggtggg ggaacagggg gaacatcaga ctgccgaggt atgagtttgg gttctcatct      300
tcttcccagg aggctttttga aaccccagga tgatgcctcc tagagccttg ctgtcaaatt      360
caataggcaa taacatgaag gatttactca gccaggctca tgagaccagc tctgaggaag      420
ctgtgctttt cttgtactga tcggtgatgt gcatcaccct aagggatagt aaacagatga      480
aacccagaaa gtccagtcaa aagagcaccc tctgggawtg aagrtctagt gaagactggg      540
gagacagatg aggaaagatc ctgaacagga gccactcatt ccagctttgt ctccatagcc      600
tgcccgccca cgatggatga agtgcgtgga ggagacaggc acgttcttcg agcccacgct      660
ggcggctttg tttgttcgtg aggcctttgg cccgagcacc cgaagtgctg tatgtgagag      720
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<210> 946
<211> 2163
<212> DNA
<213> Homo sapiens

<400> 946
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caaactttat cgtatagtca aatgagattg cacactaagg caggatgagg cagaagcaag      240
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557

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ctgctgtgca cagtggtcca ctcggctgca ggttttgcca ttggggtcca gagtgtagcc    2040
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<210> 947
<211> 1781
<212> DNA
<213> Homo sapiens

<400> 947
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<210> 948
<211> 2151
<212> DNA
<213> Homo sapiens

<400> 948
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tgaaaaaaac acttcagcag tttcctggtg gatccattga ccttcagaag gaagacaatg    240
gcattggcat tcttactctg aacaatccaa gtagaatgaa tgccttttca ggtgttatga    300
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aatgtaataa aaatgcacaa cataaaatgt ttatgatccc agcaatacac ttttaaaaaa     1860
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gctactgtaa cattcaattc acatttgaga atcatggtaa aaataacttg tatttgcctt     1980
accatcatga tcctactgtt gagttaggaa aatatggtta gacagactca cattactttt     2040
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<210> 949
<211> 1829
<212> DNA
<213> Homo sapiens

<400> 949
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gcacatgtat actgattaat ttctttcttt tttccttctt ttgatggagc aagactgtaa      720
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559

<210> 950
<211> 1581
<212> DNA
<213> Homo sapiens

<400> 950
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ctaaaaggta aaagtgctgc aataagggct ctgcaggcaa ttccatcaca aaaccccatg     180
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<210> 951
<211> 1263
<212> DNA
<213> Homo sapiens

<400> 951
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atatagccct ccttcctgga atgaaccttt ctcactgccc cccttctcca actgttggta     180
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<210>  952
<211>  1347
<212>  DNA
<213>  Homo sapiens

<400>  952
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tgtgaagcac agatgagctc tttcacactc caaggacaca gctcatccta tgctttggga    180
cacttcttcc ctgtttatta caatgactat tctccaggtt gttgcactac cgctgtatct    240
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cggcagagta tacgcccttg aatgccagga acttgtttcc ttagtctttt ttatatatct    360
agcatataag atattgctta gaatatggta gacatcactg aagatttgtt tcagtagttc    420
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<210>  953
<211>  1277
<212>  DNA
<213>  Homo sapiens

<220>
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<400>  953
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ctcaaaaaaa aaaagaaag ctgtgtgctn aaatactatt ttaagcaatt ataatggatt    180
aaaaactcct ttaatcttca caacaatgtt ttttctttct ttttttttga gatggagttc    240
tttgaaactc ttggattaaa tgactcttca gagctttctt tgctttttga tactaaggag    300
tggcatgtct ggggattttt atagcaaata attyctcctt ggctactatc cttagaattc    360
caagtgtttt taatgaaaag aggagacttg tttttagtga tgttagttgt ttttaggaaa    420
ggtgttctgc agtgtttttc gctaaggtgg ctcacgcctg taatcccagc actttgggag    480
gccgaggtag gcagatcact tgaggttagg agtttgaggc cagcctggcc agcacagcaa    540
aaccctatct actgaaaata cacaaagtag ccaggtgtgg tagtacactc ctggagtcct    600
agctactcag gaggctgagg caggagatga cttgaacccg ggaggcagag gttgcagtga    660
gcctagatcg cactattgca ttccagcctg gacgacagag tgagactgtc ttaaaaaaaa    720
aaaaaaaaac ataaaatgga gaggtagacc agcttacggg aggtgttgca cttccctctg    780
ccactggaga gactctggat ctgcagccag ggagcttgtg aaggcttctt gtccacggaa    840
atgagggcgg cagttgtgac tttctggatg gtggcccaga ggaagcaaca ctggcagagc    900
ctcttctgtg aagcagctct gagagcaatt ttgtgacatt gaaagagcaa aggataaaac    960
gttgaaagct gatccagatc tagaaaagtg tttggcaatt gctggaaaag gtgtagaaat   1020
```

561

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gatgcttgct ctgtatcgta agttatatgg tgagaagacc acaagcacgg ttcaaactcc    1080
cctcagaaat tcttttgcac agaaattaac actttaatcc taaatgtttc caatgtttta    1140
acttacagta tgctaaataa acattctttc tgtttgtttg ttttgttttg ttttgttact    1200
ctgtgcattt atagccaata gagttttttct ctcgtgccga attcgatatc aagcttatcg    1260
ataccgtcga cctcgag                                                    1277
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<210> 954
<211> 1456
<212> DNA
<213> Homo sapiens

<400> 954
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gcccttatta gatgcccaat cttctaggca acataactac aagccaaata aacctttttt      60
ctttataaat tacccagcct tagctattcc tttatagcaa tacaaaatag actaagaaga     120
catgtggcct gtggaccaaa tctgatgtgc tgttttgtg  aataaagttt tcttgagaca     180
caggtacact cattcattac atattgtcca tggctgcttt cacactacar cagcagaggt     240
gaatagtcat agcacatact gtatggcctg caagctmaaa ctgtttacta tctggtgctt     300
tacaggcaaa gctttgccaa cctctgrgtt taattgattg gggttaatat tattcattca     360
tttgtttatt catctatta  acagacagtt aacaagtagc taccatttgc cagacactat     420
tttaagatct aaggttatag cactagttac attattagac aagyytatga tcctcaattt     480
cttaatctag tactacgtat gtttgtcttt tatttatttg gggtagacta tgctctgaag     540
tttttataat gagatatgta cctctatgcc ttggtttagg gtctcccaca agcagacctt     600
caggcagttg ttttggtgga ggcatcttat ttggatggta agaaaacatg aacaggagtg     660
gggaagtatg aarggaaagg gaaggcagtc aaaaaagagt taattaccaa gccacctgcc     720
atagtgcgtg atagaaactt aayccctga  agaaactctg ggaaatctgt aagcacacaa     780
ctcagaaaca cctcacctaa gggctgagga gcagaggaat ttataatcca actcttaagt     840
gtcatcggta gatactcatg tgtgtgtatg tatgcggggg gcaagaggtg ggatggtttg     900
attctttgtt tgccttgkat ggtgaatgcc tccatatcaa taaactccat tacccagcac     960
tatattttgc tcccttcccc taccccaagg gtacagaact ctcaaagttc actgccacac    1020
ctgtttttcct agtttcggta gctacctatt aaccagaact tgaaacacag ttattaaata    1080
attctttact tcttgaagca gagtaagtgc ttccttactc aagccatatt agaacgtggg    1140
gacagatctt gaggaaggca agtatcatct cccaaggctg cctcctaggt gaagcttctg    1200
cttggtctcc cagcaaggaa aggatgctat attctaagaa taagatgtgg ataacttctg    1260
aagtctcaga gggttaagga gaatctgaga gttcaagagt ctggagtgca tttacacaga    1320
tgtccctctc cctggacata tctcagggtt ttccatcttc tttatctatg ctctgcctta    1380
gaatgttggc tggggctgtt gcttcaacac tcgtgccgaa ttcgatatca agcttatcga    1440
taccgtcgac ctcgag                                                    1456
```

<210> 955
<211> 1728
<212> DNA
<213> Homo sapiens

<400> 955
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ggcacgagag gccaccggag cccacagctc aacaggcttg ggtccccttc catgctgtgg      60
gaagtttgtt ctttcgcttt ttgcaacata gcttgctgct gctcactctt tggtttcgtg     120
ccgcctttaa gcgctgtaac actcactgcg aagtctgcaa cttcacttct gaggccagcc     180
agaccatgaa cccactggga ggaataagca actctggaca caccatcttt aagaattgtt     240
aacactcacc aggagggtct gcggcttcat tcttaaactc agcgagacca agaacccacc     300
aattccggac actgtggaga gggaccagtg gtgggcaggg ctccagaact ccaaagatcg     360
tatgttcttt gtcttctgct accaggtgga tatggaagga ccatcaggtg ggggtggggc     420
taggcgtgcc tgagctcaga ctctccttgg gtgggtcttg ctttggctgc tgtgggggat     480
ggaggtgaga ttcccaggtc agtggagttg tgtacctaga aggattatgg ctgcctctgc     540
tgagtcatgc aggttgtcag ggaagttggg gaaagctagc ttccatgcac actgaaaggc     600
tggtctcact cccacaatgc cccttgtgat agcccggagt ctgtttccag gccgaaggcg     660
aatctggctt gaaaacttac ctgaggcttt ctgcctcccg aatgacaaag aaatgggctt     720
cagttcttac cccgcctgtg aagtctgcaa gcctgattca cgccctcccc cgagttctgg     780
ccgggaggct tccagcccca ttcatttttt tacaaagttc agctagagag gttcttctcc     840
ctgtgaagtt ttacccccctg ctcctctggc caccccctg atggatgtct gccgtgccag     900
gcaggaatgg gctacttggg gatccagcgg ccttccagtg cctttgtgct acttcctcta     960
ctcctgtatg ttgctcagct cggctctcta acttgactca gctccaggta aagtcacgaa    1020
```

562

```
cttctcccac aaacagactt tcagcttctc cagtgggggt gtgtgttcat gagacgaggg    1080
tctcccttttc ccatttccgt ggttagggga cttaaagtat ttggggtgtc tcccaggtcc   1140
tgcaagagca gtctgcttcc ttcggagggt ctgtgggtcc tgtcaggatt gctggtctgc    1200
tcttgcagtc catctggagc taaaattcac aacgcaagcc tccgcatgct gctctgtcca    1260
gagctgccat ctagttctgc ctcctgtctg tcataatccc tcatgaccct tgagcttttt    1320
ttttcatatg attgttggca gcatgtatgt cttcttttga gaagtgtctg atcaagtttt    1380
tgcctatttt taaaggtttt ttttttttgt aaatttgttt aagttccttg tagatgctgt    1440
atattggatc tttgtcgaat gcatagcttg caaaagtttt ctcccattct gcaggttgtc    1500
tttttgctct gttaatagtt tcttttgctg cccagaagct ccttagttta attacatccc    1560
attcgtctat ttttgctttt gtcacaattg cttttggtgt cattgttata aaattttcgt    1620
cccgtgccta tgtcctgaat ggtattgcct aggttgtctt ccagggtttt tatagttttg    1680
tgctcgtgcc gaattcgata tcaagcttat cgataccgtc gacctcga                 1728

<210> 956
<211> 498
<212> DNA
<213> Homo sapiens

<400> 956
aaacgatgga ccctctgccc tgtggcctcc ctcacatcta ttactgtact ttcacactcc     60
tacagttgag caatacttct ctgaactcat gtctctatca aaaagtgaga gagtgctctg    120
cctctggcta gctttgccaa caacacgccc tgccctctgc agacatgtca gcctttgccc    180
aacacctaag ggtgaaatac agcatccaac agcacagcag gcagcatgcc aacagcaccc    240
gccctggga agccccaggt gctccccaga gccacaccgg gcgttgataa cattctctgc     300
atccgggaat caggccctgg cctccctctc ccctcctccc ctcctctctc cattcccccc    360
ggatcctcag gatctgttcc catggcttca atattccctt gcatacagat cacccaaagc    420
tgtcctcggg atgccctgcc cgagcccctc aaaccgtcct cgtgccgaat tcgatatcaa    480
gcttatcgat accgtcga                                                   498

<210> 957
<211> 502
<212> DNA
<213> Homo sapiens

<400> 957
ggcacgaggt tcagggtaaa tgtctagtgt caaagttctg gcaggcttta ctggggaaag     60
tggtccccag ttggtgtgag aaaaaaaaaa agtagaaatg ctgattccca tgatctggta    120
ggattttgat tctgcttctg aatggctgaa aagctttcca aaacagcttc catggtttat    180
gccacttttta tttatgtctc ttactcttttt gtggcagagt ggttgcagta ggaagtgaag   240
gaaaaaattt atccttacca caccttcctc ccaaaccctg ttagttcaac taggtaataa    300
gcccaccatt aggatgcctc agaccataag gagctgttca tttcaggact gttcctcagg    360
atatgggcat tgatttagtt aatttggcaa gtcttcacaa gtattatctt ttaaagtaag    420
acctacacaa aaagaagcag tctcattaga agaactctga gctcgtgccg aattcgatat    480
caagcttatc gataccgtcg ac                                             502

<210> 958
<211> 1099
<212> DNA
<213> Homo sapiens

<400> 958
gtggcactcc agctggtcct gcataggacc gagcctgkgs ctgtggctyc tcaggcagag     60
tggcaggtgt ttgcagtaag cagtgtcagc tattactact ttatatttga ctgatactat    120
aacaccagta tgatcttcct aaatcatata acaaaatcta agttaaaata acaaaaatga    180
aatacaatga ctattcatgg gtatttggta ttgtgctaag tcctagacag ttatttggat    240
aattgcaaca atatttacac cgtgacatgg tttggctgtg ccccacccaa atctcatctg    300
gaattgtagc tcccataatt cccacacgtc atgggatgga cctggtgaga ggtaattgaa    360
tcacaggggt gggttttycc tgtgttgcta tcatgctagt gattaagtct catgagatct    420
gatggtttta taaacggcag ttcccctgca cacactctct tgcctgccac catgtaagac    480
atgcctttgc ccctcctttg tcttctgcca tgattgtgag gcctccacag ccatgctgaa    540
ctgtgagtcc attaaacctc tttcctttat aaattaccca ctcttggata tgtctttatt    600
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563

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agcagcatga gaatggacta atatacactg gaaactgaga cttcatttgg tcatttttga    660
caccatgcca ccagaataaa acaggtacag gataatggat cctaccattg attggaaatg    720
atcatctgca ggaagagcac caatggaata caaagggtgg aacccaaatg cctctatttc    780
agcatgtcca gtgtcaaatg ttcaaagaat tgtatagcac tttatataaa taagactcca    840
ataattaaac ttttctatat ttctctgtca cttaagggat cttggaagct gagtttcctt    900
tggcgccaaa gagaacatgg actggacaga agaatttgga agtcataagt acaaactata    960
actttaggat ttgttacaga aataagtatt gtatcttcta ctatattttc attttttatgg   1020
ttttataaat aattctaaaa tgcagctaat ttctcgtgcc gaattcgata tcaagcttat   1080
cgataccgtc gacctcgag                                                 1099
```

<210> 959
<211> 1757
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1293)
<223> n equals a,t,g, or c

<400> 959
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tcacagtttt agatatgtta agctgtaaaa agttttaacc ttttctaaac tacttttgct    120
tttmccttttc gttttcctcc ttttggtttt tgtattatca gtacagtcaa tatctgattg   180
cagttacaga tcccaaatct gatgatttgg aactagtatc aggtctaaac tttgaattcc    240
cagttgtttc agagattttc acattttcca attcaggatg cgatctcttc cttttttactt   300
ccttctctgc tgtttcctgt gaatcatgaa tcacttttgt cttactaaaa ggagcctttc    360
cataggtcct gagtcttctg ccattccacc tgcgcagcca taattcagtt ccacttcaaa    420
attattctct gcagtagctt tttgtgccaa ggttgactct gaagaaaatg tcctatcagt    480
ctcactccct ggaatatgac tttttgawtc ttctcctgaa gatgtaacag aggaactttt    540
tcttttagaa ggtgcatcta ttttgtgaat attggtatgc ctgtgcttgt gttctgaatt    600
cmacatatct tcaragtctg agtctccatt tagagcctga ctaagcactt ttgtactacc    660
ttcggagtca ggatcaggtg gcttgccttc acaggcatac tgttcacttg gtacttcaca    720
atgtacactt ccttcacaat cactcaattt cttcttagct gtagtacaag caagatggag    780
aggttttttc cttccatttt tgcttctagt gtgcacattt tctaaactga catcttctac    840
atcactcatg agcttgatct tattggcagc cgtagctgca catcttcgag taatcctcag    900
gagacctgtt ctggcttttg atgatttctt aaccacctgt aaactactgt ctgagtcact    960
ggaacagacc ctttttcctgg aaattttttct gcttagtcca ttgtcttgtg atgcagaatc   1020
taaaagttaa agagcagatt tctattaatc ttttgtaagt ctaaaggaat tatatgttca   1080
atattaaaaa caagttcaga attcgtatta atttgaaggg ggtattgcag tgaatggaat   1140
ggtacacacc tattagtata gtcatatgtt gctcaacagc aaggatacgt tctgagaaat   1200
gcatcgttag gctatttcgt cttaagcaaa catcacagag tgtgcttaca caaaccttac   1260
agtacaccct actacacatc taggttatat ggnatagcct attactycta ggctacaaac   1320
ctgtatgaca tgctactgkt ctgaatcctg caggcagttg tcacacaatg gkaagtctgt   1380
gtctgtgtat ccaaacagaa aaggtaatgc actgcactag gacttgagga cagctatgat   1440
tacttcacta agcaatggaa atttttaacc ttcattataa tcttatgaga ccaccactgt   1500
tatgcagcac atgactgtac tttaaagcag taacttttttc atcctcagca ccattcacaa   1560
attcaacaca ttctcaataa catcccatga tcttgacact ataatattaa catgaataca   1620
actaaactgt ttaccatagc actagcatat gcaaagtaat cacttaacac tcagcctctc   1680
tgaaactccc cgtaactccc caagctccaa ctcgtgccga attcgatatc aagcttatcg   1740
ataccgtcga cctcgag                                                   1757
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<210> 960
<211> 1326
<212> DNA
<213> Homo sapiens
```

<400> 960

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tgagttattt tccttcacag aataatttgt ctcccatgag ggttttttta ttaagggtct     120
gggtcacctc tctcctgtgg ccggggggcgc tgctgtcagc tgttgctaat taacccatat     180
ttgggcagcc agaccccgca aagcccatgt actttcctga accttcagag taaatgccat     240
gcatcagcac caaacacaaa gcctgcgcct ggctctgaca tttggagagc ttaccctgca     300
tgtactttac cttaaagcta ttgacagtag gagattaaag tcctcgtgat gcatcctccc     360
aaggcagtgg acaacagagc cagcaccaga cagagcatgc gaactcagga gtcacagttt     420
agcggccaaa ctcagggctc accctgggcc tctggaaaac gctgggcctg atgagccatg     480
gcccacactg cagttttgac actccacgga ggtgccaaga tctttggaga atggtgagag     540
gctggatgtg ttaagatgca taccacaaag tgtagctccg actcaggagc cccgtgccgt     600
gtgactggat gggcgtttca ccacaagcgt attgtttcta gacccctgtc tcagcaggca     660
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tgggcacaca agaaactcag ctggcaagtc caggggctgg tgtgaccatc tcagatctgt     780
cactaacccc cagtgatgtg aggtgtcatt cagctctcag ggagtcattg tggctgctca     840
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gctcactctg cctccctcca ctcagtgtat atgtaacctc agtacattct tgctcttaag     960
atgccaccac ggccacccaa ccaccgagaa cgtgactttc gctttgacct tggaggtgaa    1020
tgtctgtggt catttttttgg ctgcccagcc cctgagcctc tccctgtgtg taagtcttgg    1080
agagaggccc acccccccgg ccatcacaga agctgagaag gcctcagggc tcttcctggg    1140
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atctgcctct ggagctggta gggcagagga ggagggactg gctccgaatt tattctggtg    1260
tcagtagcag aatctggcat ccagtgttgg cctcgtgccg aattcgatat caagcttatc    1320
gatacc                                                               1326
```

<210> 961
<211> 1237
<212> DNA
<213> Homo sapiens

<400> 961

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aggcaaaaga tgttgtccaa agtccaggaa tatgtaagtt gaaagctatg tgtgcagcag      60
aaccttattt ctgagttaca cagtttagtg accttctaat ggaaaaaaac ttcacggagt     120
gtgttttcca ctgccttctg ctcaccacac tgaggattac aagaggaaaa cagctacacc     180
agagtcaaaa gtgatcagac ctctgatttc ccaactctgg cagagaagct gcaacgcgcc     240
gcgcatacac acacacacac atacacacac acttacacac tttccagcca gctcagccga     300
cttcctctga gagatgacac cactttgcag cctccctgtg ggacagagtg gaacttgtaa     360
ctcactttct tgtgcctccc aggactttgg ctgcctagaa ggaagagaag ggagtgctaa     420
ggcttctctg agaaactcag agcttcctct gcagccctgc tcctggccag catgagagga     480
gggagcttga accaagagtc ctctcctgga ggggaaacct atctaagaaa tattttctat     540
caatcagtaa ggctctcaaa agccattact gccaacatca tttcttattt gccatctctt     600
ctcccccctt taaaaatgtc cttacttttt cccttttttt cccgtctttt ctttcttgtc     660
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gtttgttaca taggtatacg tgtgcgatgg tggtttgctg cgtccattct ttttttttttt     840
atttttaaa atcctcttcc ttcatttctc cccttctgcc tccttctatc ccccctgtcct     900
caatctttct gtttttcttg ctttctcctc attttctct ctttcttgtc tcccctttcat     960
agctaaagtt accgtccttg gcacaggact cgggttctga ggagtgacac agcaggagtt    1020
catcctgggg accctctcgc aggcagcgct gcacataggg aacctgtccc ggctgtggga    1080
ggccaggcag cctcccctc caaggcagag ccagacgagg ctgtccatcc tccttgcatt    1140
tctctgtcac cttgttcaga cggcctttga cttggggga gccacgctga tttacactcg    1200
tgccgaattc gatatcaagc ttatcgatac cgtcgac                             1237
```

<210> 962
<211> 1127
<212> DNA
<213> Homo sapiens

<220>
<221> SITE

565

<222> (336)
<223> n equals a,t,g, or c

<400> 962

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tgctattcaa ggaagggcat actaaatcta atggttggaa aaaaggagca gaggggccat  120
tcaatgccaa gcatagacag tttatgtttc actaattaca ctcaaagaac ctgggcctta  180
tcagctaaaa ggtgatttct ctttttcact ggtattaaca ttgttactta ttgcttatgg  240
taaatttttt ttgtttttgtt ttgttgagac gagtctcgag tctcmaaaaa aaaaaaaaaa  300
aaagtgaaag gcatgaacgc tgtaaagaag cccagnaatg gctgtaactg aatgcttcac  360
aagtctacga tttcaaaacc atacactatc ctataacaat cccyctactt ataaccyctg  420
aaagtttaaa gaaagaaact tacttaatga catcaaagag atgaatttcc gwtytacaga  480
tgcagtaaaa ctctttataa cagagttttc gtcttgtcca agtaagagtg tatatttggt  540
taagatacgt gagttaaaca tttgcacgta agcaaagtaa tttccatgtt tttcagtaat  600
aaaaattaaa acaggatgtc tgaatactac gaaaaacttt gtccatttaa tcacttcttc  660
atcagagata acagtttcaa ttttctgctg ggggtctgca agcaaggcct ctaaaccacg  720
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tacttctgct gacaatgtag ctttaaatac tttatccagg tttacatctt cattattcca  840
tattcttaaa accttattat cgtgtacaac aacatactct ccagtttgaa agttgcacac  900
agctggacat gttataattt gaccttgttt cactgaccag ctccccaagg gtttctgatc  960
agaaaccttа tagaggatga ctgtcctgcc gctgtctgtc actagaaact ggtctgtttt  1020
gtcgctctgc tccacgccta ggagtccttc aggcccggcg ctcaggacta ccgaagacaa  1080
cgtgaattct tcctccagcg ctgccatttt gcggacgcgt gggtcga  1127
```

<210> 963
<211> 1391
<212> DNA
<213> Homo sapiens

<400> 963

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ttcaagatgt tcacttaaaa aacctttcga gtcattttta aaattgtagt cctgaccttc  120
agtacgtgtt aaacaggttt tttcaaaatt taatgaggat gagttttcat atgatagtca  180
ttttacttca gagtattaca aaggattcaa caattttagt ataaaatagc agaacttgtt  240
acatatgtat ggtctattac tagctcagtc taaatttgc acatctatgg rgtctaaaat  300
tcaattggga ttacatccaa cttttgtttt aagtagcaaa gtaaaaaaat taaaatgcct  360
agtcttaaat gaaccatagt ttgagactcc attctcttct cagccacttt ctggcttcac  420
aagagcaact gtagcttttg gatattaggt gagatttgga catttccata aagcaaagca  480
tgaatagaat gctggctgcc tttcacctca tctcatccat taactgtgaa aggtgagagc  540
cagccttatt tttctaaata tcatgatttc aatatgtagc aaatgataca actgaaaat  600
aatttttggt atctacatta tgcttagagt taacatctaa actaaccacc atttcccact  660
caaatattta tttaagtccc tggaaaactt taatcattat tgttgacttg ttttttactca  720
tttwcagatg tttcttttca tttgttattt actcattaga atattcactt agtgtaagga  780
raratkgctg ttcttggaga tacraagact tcaaggagtt tacagawttg sttgggaaaa  840
ttagagtwtc wtaawtgaag caaactgcta gatgaatgtg ctggtttaca tatagaattt  900
gtttctttct agaccagtgg ttctcaaatg tgattcctga accactggca ttagcacacc  960
tgggaacttt ttaaaaattc aaatttggcc tggtgcatgt ggctcacact tgtaatctta  1020
gcaccttggg aggcctagga gagaggacag cttgagccca ggagttcaag accagcctgg  1080
acaacaaagt ggaacctcat ctctacagaa aataaaaaaa aaaaaattgc catgtgttgt  1140
ggtgcatgcc tgtagtccta gctactcagg aggctgagat gggggaacac ttgaatctag  1200
gaggttgggg cagcagcaag ctatatgatc tgattgtgcc acagcactcc agcctatgtg  1260
acagagtaag agcctgtctc aaaaaaaata tgcaaatttg aggttttatc ctagacttac  1320
tgaatcagag actctgggag tggagctcgt gccgaattcg atatcaagct tatcgatacc  1380
gwcracctcg a  1391
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<210> 964
<211> 1856
<212> DNA
<213> Homo sapiens

<220>

<221> SITE
<222> (1176)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1181)
<223> n equals a,t,g, or c

<400> 964
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gagagtgagc atccacagtt gactccctta aaaccagctc aggccacacc caccccaaga   180
agtctctgag gacatcttga gggatgcagg cccaatttaa aactcctgcc tacagcaagg   240
tgtctgtctt aatactaaca cactgcattc tatgggtctg gtaaacatct gccatctcca   300
ccccatggga gcttcttaag ggaaagcatt gagcttcctt ctttcattca ctccctcagt   360
cgatcagctg gtcagtcggt cagtcaccaa taactttgtt ttttttaaca aatatgcctg   420
agtacccact gtgtactggg gcagatacag ctgaacaatc ctctaggaac tcacaggttt   480
ataagagaaa caggaaaaag tggaggaagt ggaaggaagc caaagcatcc atcctttcac   540
tttcactgac cactgagtgg gtctcgctgg gtctcagtga aaagaaagcc gtttctactg   600
ctttaaccct ttccaatgca tgtcccttca gacagagtaa cccctgtgag ctggtaatca   660
aacagaatwt tattcaagtg aawcaaacaa tggagaaata tggagtaccc caaatttcct   720
ccctttaatt tgcacatttt gaagtgccga tattagtaag tagtttattt acatgaacat   780
acaggaaatt taacctttaa gagtttgtaa aatacggctt agtttaaatg catttatttg   840
tctaaaattc ctggtagtta attgtacttt ttttttggc aagttttcac ttgaaatctc    900
aaagtacttt aaagtaagat ggcattaaaa acagcaacag gaataagccg acgtgtctta   960
agggctcacc atgtttagac actaagtgcc gttaacatgt atcactattt actccttgaa  1020
ctcgtcctat ttgttattat atacacacca tatactgtat tattattatt gtctcagctt  1080
caccgataag gaaccctagc ttggtgagtt cagaattgct ggcaggttag ggaggaatgg  1140
acagtggaac ccagccctgg ctgtgcccag accccntttc ntctgcaata ctgtctgcyt  1200
ctgaggcgca tggagtcctt ctccagctct tcaaagcgtt gcaggtccat gttgtcccaa  1260
cagaatttaa aagtgcaggc cagcatcacc tgcaaagtcc caggttggaa gagaacytcg  1320
tctatacttc tacgggcaga taaggtcaga agtacatttt ccagtcgcca cgtaagctgc  1380
agctctctct agataaaccc gtgtctggaa tagaagaaaa tgctccccac gtgctggtct  1440
tctctgtgac ctttttaattc tggggcccgg ggctcccttg ttggtcagct cttccctcca  1500
caccatccat gtgctgaggc ctcaagccac cactgctcca gcctggacst cacccstaaa  1560
cccagtcttg tgagtgcatt ttctacactc ccactaggtg tttaaagact tctcaacctt  1620
agtgtgtccc atagagggtt cctgagckcc ccccagagct ctgcstctcc catctttccc  1680
accttagtga agtcactcca gatcacttcc tgtcacctgg aaaatgtgga gggtcctcct  1740
ggagtcctct gtttctctcg caactcacac tctgcacaca agtccatgga atggattcag  1800
gatccagcct cgtgccgaat tcgatatcaa gcttatcgta taccgtcgga cctcga       1856
```

<210> 965
<211> 1558
<212> DNA
<213> Homo sapiens

<400> 965
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tgtaaagtga tgaattgctc cacaaagtga tgaattgctc cgcaagcaac atgcagaaat   120
attgcacttt agtgttgtaa ctcacttaca ttcctagatg atgttcatgt aataatagtt   180
catacatgtt gaatgtcaaa cacatgccaa atatctcact tgtattattt gtaacttttt   240
tcccacaata ttttagggtt atatagatgg ctttgagact cagagaggcc aagaaaatat   300
tttgtgggtg aataactagt aaattggaaa gctggagttc agacttttgt ttacatgact   360
tcaaaaccca tctcttagtc tgtacctcat tggctctcag ggatctttct tagacacctc   420
attgtctatg ctctgtgata gtttgaccag ttgtgtttga taaaagagat agagatgtac   480
aaatccaaat ctgcaaatcc ttgaccatgt accatcattc atgtaggttc tattctgatt   540
caggacctgc ttggagcctt ctctccaact catatggcat tctcccatcc tgacaatctt   600
ccctgagtct tctgcaagtt gtagaattgc tcctccccct ctgctataag gcctgcatat   660
aaaattggct gaggaatgtg cttggctctt ttcctaaaga ttataaaatg atcatgaccc   720
tgtgaggcct taatgcccta cagagagaag ccctaaaaat ctaaactcaa ggaaaactgt   780
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567

```
gtttttcata gtccagactc atttgtatta aatagatcac aaccagataa tccctgagaa    840
atttattata tcaaagtttc tccttttga gttgatctaa aggctaggaa gagccttgca    900
cataccttg argatagatt atgtgtatgt gtatggctag gaatttacgt gtattaattc    960
cttaaccatg tatgactgag ctcccatgtg acaccaaact ttctttttct gagccatttg   1020
ttgtgagttc tttgtgcttt tttaaccttg tctcctatgt tttcctacaa accacgtctc   1080
cactagccat actgaactca atatttcttc tttacatcat tttaggcaag ctgtacatta   1140
ctggaaagag atgatgggta aatatactag gtgaaggcct aacatgtgat ttagctggct   1200
atgggtttaa aagctcatca gaagtgaggt tgctgcacac aaaaaaagga gaagcagcag   1260
tgaatattag caaaatattc tctaaaagct cttctttct aatatgggtc ctggggaccc   1320
tgtccactca aaggagggtc ttcaaatttg ggaaatatat gaattttagc agcatcacag   1380
attttatttt actgttgttt tgttttagt aagtgaaatc tgagtccaca tgcccgaaga   1440
acttatatca tctatgtgaa atcatatctt ggagaaaatg aataggattg gggacagtgg   1500
cagcaaatct tctcgtgccg aattcgatat caagcttatc gataccgtcg acctcgta    1558
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<210> 966
<211> 1858
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (490)
<223> n equals a,t,g, or c

<400> 966
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gggactttac ccctcctgta aagatgttat gccccaaaaa tgaagtggag ggccatatcc   120
tgagggaggg gagggatcty cagagttgga agagtgatgc ctttttgtcc gcacttatat   180
gaatacaaga atgtcatttc tgaagctccc cgtatcctag cttctggaat agcttttgtt   240
aggcctgcta gtctgaggag ggatccyaaa attccggata agacagtccc ccaccctgat   300
ggggstttgg gcaaaaatta tgtctttcta attggtgagc ccgggtgcct aaagaaggtt   360
aacagagtcc tggagtttat actagaaatg attcttacag gagaaactag aaaagcacca   420
gagacaggga gtggtttcca gaagcgggac tagcctcaga gaagagaggc aagagaaagt   480
tttkctgacn mgcattagga yccaggaggc aaggstcagg ataggtagga tagatgggcg   540
agtctcgctt gggcaacatg acttcgagag ttctgctcat ggccacaggg tcaaccaact   600
tgttgtcagg accccggagc tgaatggctt tcctctctgt cgaccctcgg ctcagcccgg   660
aagtacagga aaagcggaaa gctggttcca ggcaaaccaa cactcccaac tccgaagagt   720
caggggttgt tagagagccc tatcccggaa agcctgacac ccgtgtcttt agtccagcgg   780
ctgtgctagt cagtttaac tggccgctag tcacttttaa ctggccgaca ggtgcctggt   840
atttagccac cgaattctaa gggaaaacag gacagaatag caagtgaaag gggtcagatg   900
gtactcactg cttggcaata gcgtcagccc caagtgagga tggggaaggg gttttacagt   960
cctctataag caggaattgt cccagtctga tgtggctgct gcgtagtgcc cgctggccty   1020
cctcttgatc ttcarggggt gtcttctgcc cagctctctt cttgcttctg ctaacttgct   1080
gatgcatgct gctggcgcaa ctgtccttgc gcattggac tgggcttgaa gagggaggaa   1140
gtattcattc ccttaagctt tcaggcttgg gggagaatct ttcacaaccc aatgatactc   1200
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tatcaaatac tagatcttat gcattctatt taactatatt tttgtataca ttaactgtct   1320
ctcccctcac tcccttctca gcctctggta accattatct agtctctctc tccgtgagtt   1380
caattgtttt aatttttagc ttccacaaat aagtgacaac aggcaaagtt tgtcattctg   1440
tgtacctggc ttattttact taacataatg acctccagtt ctatccctgt tgttgcaaat   1500
gatgggatct cattcttttt ttatggctga atagtactcc attgtgtata tgtaccatgt   1560
tttctttatc cattcatttg ttgatggaca tttaggttgc ttccatatct tggctattgt   1620
gaacagtgct gcaggaaaca tgagactgca gacctctttg gtatactgat ttcctttctt   1680
ttgggtatat actatgagtg ggattgctga gtcacgtggt agctctattt ttagtttttg   1740
gggatcctcc aaactggtct ccatagtgct tgtactaatt tacattccca ccaatggtgt   1800
atgaggattc cctcgtgccg aattcgatat caagcttatc gataccgtcg acctcgag    1858
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<210> 967
<211> 1760
<212> DNA
<213> Homo sapiens
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<400> 967

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tgtggccatg tcctaggcag ttctcccacg ctttacctcc atctatcctc accacagcct   180
cagggggttg caggggtatc cccagtctac agatagcagc agggcacagc tacttaccca   240
cagacatcaa gcagacaggc ggtactggac ccagacctgc tgactgggag ctggcacact   300
tcccctccac ctcctgctca ggagggactg ggctctcgcc tgctctaacc cctgggagct   360
ctgcgacccc tcaggcctca gtgtcccagg ttttgccact gcaaatcacg acatgttaac   420
attccttctc cacttcccca aagacgcctg aattcttcac ctgctcactt catctcaccc   480
agtgctcaca accatcctgg gaacctgtga tcccatcacg cccattttgc agatgaggaa   540
actgaggtac tgagagacaa catcactcat cggggtccga accttggaga cctagctcca   600
agatacccca gaataccaag gtgcgtcttc cctagggtcc tctcctgcac agaatcacct   660
ggaagctctg agaatacacc aaggtctgca gcccccaccc ccaaccccac ccccacgatt   720
cggaactaac tggtctgtag ggtggagccc aggccccagg attttgtgac tctaaggggc   780
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tggaggagga agatcccaag gggaactcct gaatttaaat cagaccttca ggaaggcaca   900
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tggaggcagc ggcggggggc agacagaggc agagggctca gtctccagat ttagtaccgt  1200
gacaagcctg ggccagcaga gaccacatgt tccaggcagg gtccatgcga ggagatacac  1260
gtgccatgca ctctgccttg ccttggggac acaccgcccg caggagacgg ctcagcacct  1320
gcatcagcga gtagacactg agtgtcactt gagtgccaag ggtgggagcg ggggtcgcag  1380
cctgagcgcc ctgctgtgtg gccctgggcc ctccagtcta cctctctgag ctgctatctg  1440
cttcccccag tgcaaaaggg gagaaaagtg tctgctttgc caggggctg agaggaggca  1500
tctgagcccc tgccccagtg tgtgggaaat caagtctccc cccaggactt cacagaggag  1560
atgggggaca ggggcaaggg ggctccctgg gacattggcc tgtctccttt tccatctgcc  1620
catgcctctc tgcaccctct tcccacccac ccagctggag gggagccccc gtctcttggt  1680
ccttgctctg cttttcacgt ttgctctctc tctctggacc tcgtgccgaa ttcgatatca  1740
agcttatcga taccgtcgac                                              1760
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<210> 968
<211> 588
<212> DNA
<213> Homo sapiens

<400> 968

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ggaacactga ccaagttcac tggaccttac agagttaagt gttaccagtt accatgcacc   180
caggtacatt ctctcccacc atgcaccaca gttagatacc accagcaagc accagaagcc   240
atggccaggg cattctctgc taaaacatac cattaaccaa aagaagaaca caatgcagct   300
acattcattt catttgtatt ctttgttatt ggtttaatta atagtttgt aaggtgggta   360
aaaagtaaaa aacacaccaa ccttctcgca gctctgaggg atgtagggg tttgatgcag   420
aacacaatga aatgaggaaa ggagaaaaac aagggaaaca cagagagagt aaaaaggcca   480
tatcaaggct ttcaactgct acttgaacat ctttattcgc tctagttcat ccttcctatc   540
tcagctggaa aagttagcta ttgtttctaa taccatgttc tcgtgccg                588
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<210> 969
<211> 1453
<212> DNA
<213> Homo sapiens

<400> 969

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gaattcggca cgagctgggc tcaagcaatc cccctgcctc agcctcctga gtagctggga    60
ctgtaagtgg gcaccactac actcagctaa ttttttttaaa tttatttttc gtagagggtg  · 120
tcttgctttg ttgtccaggc ttgtctcaaa ctcctggcct caagtgatct tcctgcctca   180
gtgttccaaa gtgctgggat ttacaggcat gagccactac accatgccaa agtcacacct   240
cccctgtccc ctgggatatg gcccaggaaa gcctgtcccc tctggggctt ctaattcttg   300
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569

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        tctgtgcaga acctagcgtg tgtgcagagg gataagaatt gaatgaggtg atgtctgtga      360
        agtgcccagc atagtaacta gcatacaaca gactgttagt agttggtacc ttatttgagc      420
        gttccagaat cactacattg ttccctgcca ttatttawaa tamaaaattc accttttaaa      480
        ttgtgggagc tctgctttag ttacatatga agctggcttt tcagcagttg ccattctgta      540
        ccgacatttg ctttatatat atatattgtt tgtttgtttg tttttgaga cagagtctct       600
        ctctgtcgcc caggctggag tgcagtggcg cgatctcagc tcactgcaac ctccacctcc      660
        ctggttcaag caattctctt gcctcagcct cccgagtagc tgggattaca ggtgcgtgcc      720
        actatgccca gctaattttt gtattttta gtagagatgg ggtttgcca tgttggtcag       780
        gctggtcttg aactcctgat ctcaggtgat ctgcccacct cggcctccta gagccacatt      840
        tgctttaaag accccccgct ttgcacaact ataaatgagt gagtgtcacc tcttttgga       900
        ctagtctccc caggaattcc cagctgactt ttttcatttg ttttgtttwg tttagttttg      960
        aaacagagtc tctgttgccc aggctggagt gcagtggtgc gatcataggt cactgcagcc     1020
        tcgacctcct gggcttaagt gatcctccca ccttggcctc ccgattagct gggactacag     1080
        gtgtgtgccm ccacacctgg cctttttttt tttttaagag atgtagggct gggtgcagtg     1140
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        gtttgagact agcatggcca atgtggtgaa atcccatctg tactaaaaat ttgaaaatta     1260
        ggcacagtgg cttacgcttg taatcccaac actttgggag gcagaggtgg gtggatcatg     1320
        aggtcaggag tgtgagacca gcctgaccaa catggtgaaa ccccgtctct actaaaaata     1380
        caaaaattag ctgggcgtgg tggtgggctc gtgccgaatt cgatatcaag cttatcgata     1440
        ccgtcgacct cga                                                        1453

        <210> 970
        <211> 775
        <212> DNA
        <213> Homo sapiens

        <400> 970
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        ggaagcagag catttctgac acttaaggtt gtatgcgtga gggagaaggc tttcacagct      180
        taacttgtac cagagcagct gcatgggtgc tgacagctta acttgaaatc tgtgggagga      240
        aggatccttt ttcactcatt caacaaatat aaccattcaa tgaatggtcc atgccttgag      300
        gtgaggatca tcaaggtgtc tctgtaaata gcctggatgc aatctgaggg gagttgtttt      360
        gacggtggta ggtattaagt tgagggaggc agtgtggaat taaaaccaga gaactgtttt      420
        tgggtactgg taattgttaa tatatgtgcc tgtggatgtt ggaacttctt ggctgggctg      480
        aaggaatcct ttgaaagact gatttcggca gggcgcggtg gctcacacct gtaatcccag      540
        cactttggga ggccgaggtg gcggatcac gaggtcagga gatcgaatca cgaggtcagg      600
        agatcgagac tatcctggct aacaggatga aaccccgtct ctactaaaaa tacaaaaaat      660
        tagccgggcg tggtggcggg cgcctgtagt cccagctact cggggaggct gaggcaggag      720
        aatggcgtct cgtgccgaat tcgatatcaa gcttatcgat accgtcgacc tcgag           775

        <210> 971
        <211> 824
        <212> DNA
        <213> Homo sapiens

        <400> 971
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        caccacagca tagaacttca ttaggcagcg agacgtccat gtctgtggca gaaacagccc      120
        tgtgggagct gtatctatgc tcccgcccac ttctgagcct gcctgagaga acagtgccca      180
        ccagagctct cttctccacc agtgtgttgc tgacaaaatg ggtgaaggca gaattcaacc      240
        ctggcctcag gcaaggcact tcctctacct ctgtttgtaa aatgggagta gacatctgtt      300
        tctctcagct ctgtggcaga cactgagcta tcgaggcttt ctgtgtatgt tttttttgca      360
        aactctgcaa aggtgtgatt atacaattgt ttataaacaa taaaaccaaa gcatagaaat      420
        ttaaaaattt attaaaaatc atgcatctac tcaatgacag ggctcccatt tatacccaag      480
        cagtctaact ttttttttcc gagacggagt ctcatcttgc ctcccaggct gggagtgcaat      540
        ggcacaatct caactctctg caacctctgc ctcctgagtt caagcgattc tcctgcctca      600
        gcctcccaag tagctaggac tacaggcgca cgccaccacg cctggccaat tttttacatc      660
        tttagtaaag acggggtttc accatgttgg tgagtctggt ctcgagctcc tgacctcgta      720
        atctgcccac cttggcctcc caaagtggga ctacaggtgt gagccaccgc acctggcctc      780
        gtgccgaatt cgatatcaag cttatcgata ccgtcgacct cgag                       824
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570

<210> 972
<211> 1298
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1265)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1292)
<223> n equals a,t,g, or c

<400> 972

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ccatggatca cttactgcat tctgtactct agcactgtgt atgcatcact cttccttatg     180
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gaggtagcac agaagggccc aaagtcctag atcctcaggg aaagaccaac tccaagtcca     300
gggaaaagct ctatgcaaag ggctgcccgt catctctgcc aaacttaagt ggcgtggctt     360
ttcttctgac cttaaagatg ttgttctggg taggggtgtc aatgcccaaa tggagcatgg     420
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gctggatgaa cttcccaaag cgactgctgt tgttattcct cagtgtacac gcattcccaa     720
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acgtccatgt ctgtggcaga aacagccctg tgggagctgt atctatgctc ccgcccactt     900
ctgagcctgc ctgagagaac agtgcccacc agagctctct tctccaccag tgtgttgctg     960
acaaaatggg tgaaggcaga attcaacct ggcctcaggc aaggcacttc ctctacctct    1020
gtttgtaaaa tgggagtaga catctgtttc tctcagctct gtggcagaca ctgagctatc    1080
gaggctttct gtgtatgttt ttttttgcaaa ctctgcaaag gtgtgattat acaattgttt    1140
ataaacaata aaaccaaagc atagaaattt aaaaattatt aaaaatcatg catctactca    1200
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<210> 973
<211> 1808
<212> DNA
<213> Homo sapiens

<400> 973

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<210> 974
<211> 1349
<212> DNA
<213> Homo sapiens

<400> 974
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<210> 975
<211> 1953
<212> DNA
<213> Homo sapiens

<400> 975
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572
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<210> 976
<211> 1632
<212> DNA
<213> Homo sapiens

<400> 976
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tgagtataat atctataaat gtcaccaaag tcaagttggc tgataatttg ttctgggtat      300
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ctataatttt caactttaat taggcgcata acgtgtcatt gtatctttca gatgggctga      480
ccttttttatc gtcatgaatt ttgaattttt ttcctaatta gcttcgggat gccagggtat      540
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gtcgacctcg ag                                                          1632
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573
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<210> 977
<211> 1363
<212> DNA
<213> Homo sapiens

<400> 977
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acaggcgcct gccaccatgc ccggccaatt ttttttttgt attttagta  gagacggggc     180
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gaatcctttc ctcagggctt ctaggtggtg attactgcca tctaagggca gcacatgttt    1320
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<210> 978
<211> 1302
<212> DNA
<213> Homo sapiens

<400> 978
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tctggagtgt tctcatttgc taacatctgc ctccctcggc aacctttcct ctgtaatgga     420
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<210> 979
<211> 1230
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<212> DNA
<213> Homo sapiens

<400> 979
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<210> 980
<211> 361
<212> DNA
<213> Homo sapiens

<400> 980
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tattttattt ttagaatcag gcaaagggat tctagggatg ggcctgaaag gggcagctct       180
gtgcttgttt attacatggg tacactgcat actggtggtg actgggtttc cagtgtactc       240
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cctcctctct cttggagtcc ctcgtgccga attcgatatc aagcttatcg ataccgtcga       360
c                                                                       361
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<210> 981
<211> 1603
<212> DNA
<213> Homo sapiens

<400> 981
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575
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<210> 982
<211> 1647
<212> DNA
<213> Homo sapiens

<400> 982
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aatacggtga attatacaag gcaaccaact aggagttagg atctgcttca cagctgttta     180
cccaggtaaa ttatctcagg gccaagcata gttggaatc actaggctta actctccagg       240
tttcccttgt ctcccaaaga tttctcagcc tgcggcaagt tttttggata catctatgat     300
ttttaaaaat attgtatctt ctttattctc agcagcaggg taggtaggag ttacctagtc     360
catgttatca aatggaactg ataacagttc cattgataac acaaggccca caaatcaaaa     420
gatataaaga gttatatagt gagaagctct ttataccttt tgatttgtgg gccttgtgaa     480
tgcctcactt atataaaaat aaagataatg tgaaaccatt tgaaaactgg aatgaaatga     540
atatattcct agamcaatat aaatgataag gattgagtca taaagcaaat taaaaaaaaa     600
aamaacaatg agactgaaag aaggtgaatt ggtaaccaaa agccttctcc caaaagacac     660
caggcacaga tggtttttaca caaaagcttc atttcagaga atagaaaaat atacaaatta     720
yytcggagaa tataaaaaga aaaaaatcc aatttatttt acaaawtgta ttagttaggt     780
tttgcttcac tcatgtcatg taacaaataa tgccaaatct cagtaactta caacacttct     840
cactccattg tctgtggatc tctgtaacca tgtagttata tcaatcaata tagaaaatgt     900
acttaataaa attgaacact cactcatgtt aaacaaaaca gacctcatat ccaactggta     960
ctagaaggta acatgaaaag agacatcttt ctaaaaccta tagcaatcat tatagttaat    1020
attgaagtat gagagatttt ccattaaaac caggatcaaa tcaagaatgt ccataataat    1080
ggtttctatt caaactgtcc tggttgtgtc cttcccaggg taggttggga ggtaggaaga    1140
tgaagaattc tttgatgaca ttaatttttcc ccattaagca tgaggcaatg ttatcagctg    1200
aacatgggtg ggaagctgtc agaggtttgg taagaaggga aggtattgac taagcatctt    1260
gtagagtggg agagcaaact tattcgggaa ccatccaagg attgtgagaa aaagttaaat    1320
gtccactgtg tttggtgatc atgaatggaa gaggaaacct ataagagttt atgactttcg    1380
gctgggcgtg gtggctcacg cctgtaatcc caggacttcg ggaggccaag gtgagtggat    1440
cacgaggcaa ggaattcaag ataagcctga ccaacaaggt gaaacctgtc tgtactaaaa    1500
atacaaacat tagccgagta tggtggcacg tgcctgtagt cccagctact cgagaggctg    1560
aggcagaaga attgcttgaa cccaggaggc ggaggttgca gctcgtgccg aattcgatat    1620
caagcttatc gataccgtcg acctcga                                        1647
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<210> 983
<211> 1497
<212> DNA
<213> Homo sapiens

<400> 983
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gattcggcac gagcactatt agattcatca tgaatgatct aaaggggtta ggataggata       60
ggactactaa gtagtggatt cagagaaaca ggtttcactt caacatctga tggacctttc     120
tcacagtaag agtcctccaa agaaggggtt ggctgccctt aagtgttccc catcattgga     180
aaattcaaac atggcttggc tagctgcttg gtaaggatgt tgcagaagga agtcaggcag     240
cagattttga ttgtcttgat gacttttaag gscacttaca ttagggagtc tytatttct     300
accttttca ggcagaatct cctcttgagt ttacacaata tttatcaagt cttctctgga     360
atggaaggag agaagtcaaa gttaaccctg ttaaacatat tctagacaat cattttactt     420
```

576

```
tcttggaagg attttttagga cagagagatt cttcccatct tgtgcttgtt ctaactacat      480
taactattag tactgcattg atggctgact tactgggaag actgcttgga aaaatacaag      540
aagccattgt gggaaagtgt attctccaaa agaattccaa atgaatgaag ttgtttggat      600
tttgtctgag tgcaggttta tacacacatg catttatgta tttcctgaat ctttttggga      660
tataagataa gtttttccas agaaagcttt gctctgtgca taagcagaag agaagaacat      720
gaggaaagca caagagtgta gggacaagaa mctggccata ctcaaaagga actgaakgaa      780
gtccacatga ctgggcagga aatggggctg acactgctgt tatttggcgt ctttctttcc      840
taattgggca gcatagaaga gagagagcag cagtcagact ctggggggtg ggggggcgg      900
tcaacactga cccctctgac atcatctggt gggctgggaa taatttctga aatagtgtac      960
caaacatgtg cagacaatta tgtctgatga cataagccca ccacaaaaac tgggcctgaa     1020
aatgccactt gaaagartct ctcactttgc attaattttt ttttccatga actgtggtta     1080
ttttattct gggtctttaa tatgcagggt aaatgaatca aaggctgatc gtgatatgtt     1140
cttttgatat cagttttaaa ttgtgccacc tgcaggaggc taagcttgtt atagtgagat     1200
gtattttttag atggtggtat tcgatgctaa gacatgtgtg tatagagcag gacaatract     1260
gccagcagra ragagagagg aggggagaca agaagagaca aggacaggaa tgaaagcttt     1320
gagccaagaa atgaaaataa acagttccta accccaaagc tgcagtggaa ttcccagctg     1380
ggctctggat tgtgtttgat tcggtggagg acattttctg ggcagcgttt atctgctccc     1440
ctggctgggc tctcgtgccg aattcgatat caagcttatc gataccgtcg acctcga       1497
```

\<210\> 984
\<211\> 1566
\<212\> DNA
\<213\> Homo sapiens

\<220\>
\<221\> SITE
\<222\> (1068)
\<223\> n equals a,t,g, or c

\<220\>
\<221\> SITE
\<222\> (1100)
\<223\> n equals a,t,g, or c

\<400\> 984
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gaattcggca cgaggctttt acttctgcac ctcctgccat gttttccctt agacttgcta       60
tattctctgc ttatgaatct cttgccaggt cctctctgag agtggctgca tcctgcacaa      120
acataacctac ttctgaatcc tatcctaggc tgaatacccc ttccacccctt tcacttcatg     180
tcagtatttt tctagacttg ttgtactctc caacaatcca ctttgtgcca tgtcttccct      240
gaagttggct gcgccctccc ataattactc aatcctgtat acccaccacc cccaccccag      300
gatgaattct gaggtagaat gtatgccatt cacatccgtg cacatcctgc cagattttct      360
cctaggatgt ctgcacactt cactcacgtt cctttttactg aatcttcccc tatgcatggt     420
actccttcca ccattcaacc gcctggatgt cctcacatct gcttactgca tcctgcatcc      480
acacacctcc tgccaagtct tcccttacac tggcagcatc ctccactcat gaacttcagg      540
ccaggttctt ccatatgatg gctgcattgt caacaatgta cctcttctca agtcctccct      600
tagactagac attaccytttt cccttgcact gcatactagt cattctctag gctccctgca      660
ccctccacat atacacattc tgctgcagat agcgttatgt tgataatctc accacccaca      720
catgttctgc catgccctct tcactargct aratgctccc tcctcccatg cacatcatgc      780
tgaattatca aatttggctc cattaccaac ccttgaaatt aacatttaac cctccaatag      840
tttagataca aagaatatcc ttgcattttt tgctagaaac cctcctactc cagcttcact      900
ctctgttgat gcacttccta caggtttctc tgtgaggcta gcttcacatt tcctcatgca      960
aatccagcaa tgtccaactg acaatgcaat tactgctagt tagttcccag actggctaca     1020
ccctccgaac catgcacttc ttggtgcacc aaamttcagg ctggcctnac tcttaagctt     1080
cctgatgggt cctccccgan gctggtgcat gctgtagtca taattttcct gactactctc     1140
cctttgactt gctgaaaatg ccacaaatgc acttaggact gagtactccc ttagcctgga     1200
tctccctcac tcacagaatt cttgccatgt ccttgcttag gctttaccct ctcctaaacc     1260
ccctaaacct cctatggggt tcccccctag gctgcctttt cctacctcag ttgcacctcc     1320
tgagtgcctt actatagtgt gtacatatgc acggagtgca cacatacata tagcacctga     1380
tgggacctcc actagcctgg atgttccctc tacatgccat atcctccttt atactgcgag     1440
tttcctacac ccttttcattc cagccagaat gtatttatta taaactcata aacctactcc     1500
aatgttattc cataagcttt ctcgtgccga attcgatatc aagcttatcg ataccgtcga     1560
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577

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cctcga                                                                          1566

<210> 985
<211> 1782
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1638)
<223> n equals a,t,g, or c

<400> 985
ggcacgaggt ggtggtgggt gcctgtaatc ccagctactc aggaggctga ggcaggagaa      60
ttgcctgaac ccagaaggta gaggttgcag cgagccgaga atgcaccact gcactccagc     120
ctgggtgaca gagcgagact ccatcccaaa aaacaaaaaa caaaaaacaa aaaaaaccc      180
aactttttat gattttagtc ttttacaatt tattgagacc tgtcttttgg cctaacatgt     240
ggcctactgt ggagaatgtt tcatgtacac ttgagaagaa tgtgtatttc cactgttgtc     300
aggtggatgc ttctgtacgt gtccgtccaa accccatgtt tattaatctt ctgtgtagac     360
gtcctgctta ctattgaaag tggttcattc cagcctccag ctatgattag agctacccct     420
tactttctcc aattccatca atggttgctt cacatatttt gggactctgt ttttgatttt     480
ggtacatata tatttaaaat cattgtatct ccttgttgaa ttgacccttc tgtcaatata     540
taaatagcct ctgtccttca ttttcttaat tattgtcttt tttgtggatt tttttggagt     600
taactgtttt gatttccctt ttatttcctg ttgcgtatat atttttaaat actttctttg     660
aagataaatt tataatatta ggattaaaca tagaaccta gatttataac agctcccttc      720
ctcccttgct gtcgcaggtt tcatcttttt tttttttttt ttgagatgga gactcgccct     780
gtagcccagg ctggtataca gtggttcaaa tgattctcct gcctcagcct cccaagtarm     840
wrrgactaca ggcaaccaac accacacccg gctaatcttt gtgttttttag taaagatggg     900
ttttcaccat gttggctagg ctggtcttga actcctgacc tcaagaaatc tgcccgcctt     960
ggcctcccaa agtgctggga ttacaggcgt cagccacggc gcccggcctg tcacaggttt     1020
cacctttaca cattgagtgc acggtaacat agacgtacac ttatctttta tgcattcatc     1080
ttttaatttc tgtagcaaca aaggtggagt tacaaaccaa atacataatc ttgttggttt     1140
tcctggtcgt ccctgtattc accatcgctg aagacctttc acttcatata gctttgagct     1200
aatgccgctg tccttttatg tcaatctgca aggttccctt tcgcattctt gtagagcaag     1260
tctcaagttc cgtttatctr ggaatgtctt acwtcctcct tcattgtgaa ggatagtttt     1320
actgactata aacttcttaa aatttttttt tctttaggaa ctttatcatc ccattctctt     1380
ttgtcttcca tggtttctag agaaatcaag agataagctt tttctggaaa ataaataatc     1440
atcccttgtg tgtgatgagt cacttctctt ctgctgcttt tgggattttc tctttatccc     1500
tcactggttt gattataaca tgtcttttgc aaatctcttc atgtttatct gacttgaagt     1560
tcattatgct tcttggattt gtatattcac atctttcctc aaattttgga tgttttttggc     1620
ttttatttct ccaaatantc tttcttttca tttcgttctc ttttcccttt tcggagactc     1680
ttgtaatgtg taggctgatc agcccgatga tgttccacag accctcaagt ttcggctcgt     1740
gccgaattcg atatcaagct tatcgatacc gtcgacctcg ag                        1782

<210> 986
<211> 1406
<212> DNA
<213> Homo sapiens

<400> 986
ggcacgagca ccactatctg tttcttccct ttttccacaa ttggaactgg tcatgcaccc      60
acccagtcag ggaatacatt tctgagcttc tatgtcaatt atgtgtgacc acaagactag     120
gttttcactt ctagagtatg aatggcaatc atgcatggat ttcttgggct ttctctatgc     180
tcttcttccc ctctccacta cctggaatct atagcaaact gacttacaat tcagagaatt     240
agaatgtcct agagaaagga ggagcaccaa tgagaggaac cttgatcact taaaacctat     300
gtagagcaag gactttcccc aacttaaaac actataatgt tgaatcttcc ttaagccact     360
gaattatcaa tggatgtcat tttcatagca ggctactctt atcctaacta aagtaatggt     420
tttatacaat atactttggc atcagaatga tttagttggt aaaacattgg atcttgggtc     480
aaaaactcta gggtactttg ataaactctg ccccaatttt ctgagttggt cggaggcttg     540
ttacttacag taactgtgat tttattttcc tagataaaaa tatacaactc caggtaggcg     600
aaacaggaat ttctaacact gacctttcta attcctaatt ctcccaagta agagggctac     660
```

                                578

```
aataaccggt gattgcccta ggcatgtgtc attttagtcc caagaaatgc ttgtatacca    720
acatactgcc ttagggtaat gtaatgggaa aataatcaag gtgagttttt ggcatctgga    780
cagccacgga tagctttccc atgaaagggc aaatatactc cattttgaga caattagaac    840
aaaattgggg gagacgattt tagttacatt ctgtatatac attcaatgat ggcagccagt    900
aagtcctaaa cttcagtgtg tatgaaggga acttgttaat catgcaaatt tgaggactct    960
cccacgtgcc ccagagatca tacttcggtg gaactagagt tgaccctata atctcaaggt   1020
taaatattac tttaagtgat tcttttttt tttttttctt gagaaggagt gtctgtcacc   1080
caggctggag tgcagtggcg ccatctcagc tcactgcaat ctctgcctcc cgggttcaag   1140
tgattctcct gcctcagcct cctgagcagc tgggactaca ggtgcttgcc accaccgccag   1200
gctaattttt tgtgttttca gtagaggcgg ggtttcactg tgttagccag gatggtcgtg   1260
atctcctgcc ctcgtgatct gcccgcctca gtctccgaaa gtgttgggat tacaggcatg   1320
agccaccatg cctggcctaa gtgattctta gatagtgacc tcgtgccgaa ttcgatatca   1380
agcttatcga taccgtcgac ctcgag                                        1406
```

<400> 987

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attcgggccg agatcagagg ttcaagccat ggctggagca gccacccctg aagtagacac     60
cctaatatcc ttcccactga gttcctagtt ctacatgctg gagtgaggct gtcaactctg    120
aagtgtcaga gtgtgtctga aaatgattgc tgtgaaaaat aaaatatttc acattgcagg    180
cctcattttt aagttatttt tcccagagaa catttcata ttttagaact tatggtaatg     240
ttaacacttt ctatttgcat aagcacttcc ctgttgggag atactgcagg tgtaagtttt    300
tctgaggagt gtcataccac catggaacta ttttccatcg atctggagat agggaacttc    360
ttgtatactc tgagagagaa cttctttgag atgtaaacta gactgaccta ctttagaggc    420
tgcctgtatc ctaattttct gttttaaaag agtgatggct gaacactgaa aagctcggga    480
cattttagaa ctgtgctgcc caatatggtg gccactagcc atatgtggct atttaagttt    540
aaattgaatt aaaataaaat gaagtggaaa aaattaagtt catcaattat attagccaca    600
tgtaactgat gactagtggc tacctaccat atatagaaca tttctattat tgcacattat    660
tctactggac aatgctgttt taggatgtag aagtcctgat ggataatatc aaagccacct    720
taccacagac agagttttac agagctgtga agtaattctt actgggaaca ccagatactt    780
acttaccatt ttatatagcg tatgtggcat tctctcatct tatcattaga gcatgcctgt    840
atctttagcg acaatagcat tcaaacacca aatgttatat tgtctgtctg gaaatgtttt    900
cttatacaac tcaaggggga agagaggaat atgtcgtgag taaatggaat tatttttctc    960
tgcaccacat cattataaaa actcgaagag gttgggtgca gtgctcacgc ccatgatccc   1020
agcactttgg gaggccaagg caggtggatc acttgaggtc aggagatcaa gaccagcctg   1080
gccaacatgg tgaaatgctg tctctactaa aaatataaaa attagacggg catggtggtg   1140
ggcgcctgta atcccagcta ctcgggaggc tgagccatga gaatcatttg aacatgggag   1200
gcggaggttg cagggagccg aagtcgcgcc actgcactcc agcctgggtg tcagagtgag   1260
actccatctc aaaaaaaaaa gaaaaaaaaa aaaaaaaaaa ntcgaggggg g            1311
```

<400> 988

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ggcacgagga gcccagtagt gacttctgtg gtccctgact tgcaccctca ccctattatt     60
ggagttgtgc ttcatttctc tgtgtggaaa gagtgaagta ttgggaaata tgaccctggt    120
caccaaacca actcagagac agcaagtgct ttggcaaagg aaagggctgg cacagagaac    180
agaaacttcc aatactatgt tgaatggagg tggagaactg ggcattcttc acttgttcct    240
gatcattctt gacatttccc ttttagagga aaagctttca gtcaccactg aacataaggt    300
cgatttctca ttgtcttcac caatcttctg aacccgtgaa tacttttgc atgatgattt     360
gaagcagcca ggaggccaag acagcggcca ggagaagcag caaggaattg agccttgtac    420
```

579

```
attttttctca aaaaaataaa agatggggaa ccaccatgct cgagataaga aattagtctg    480
tgaagagacc ttcaagttct gtaaatggta gaaaaaaatt taaatgagac atatctttct    540
caatttgcat cccaattatt ttcttaaatt gtcattcact gtaacctagg gaaaacagaa    600
ttcagaatca catggcagta atgattttca tgtcctttcc ctaactctac catgactccg    660
ctcccctaac acacctaggt gtctttcttt cctttgtggc tcatgcaatt tcttctgcct    720
gcaattccag taagaatgga gactctggga atggatttca gaattattca ggaggaataa    780
ttttcaggat gtgtgagtga tcaaatctag gggccaagca agtcaaagag tgaaagaaga    840
gctcagaagt tgaacacatt taagaggaaa gatgaaaatt ttggttcagt ggtgtcagta    900
gtcaactaga tggaagtgta agaaggaaga tggaaatggg agactacaaa ataggaaaca    960
gagctacaaa gagaaataaa gtaatccaaa gaaagagcat ttattagtgg acaccaagag   1020
ttggacgtag atcctttgga aatgtaatat ttcaattgct cacaaattct ccaaattgac   1080
aatatggcaa gtctattcaa agataagtaa gtcatggtac acagaccaac tctattacac   1140
caaggacaca taccaagact aggagaaaag agagactggg aggaataatt ctgccttcgg   1200
accagaggaa gagagcaaga gttagagaca gcttcctgga agaggtggca tttgagctag   1260
ctctttaagt ttcaatggga gaagaaagaa aaggcatctg gaaacaagga agcagcagta   1320
gcaaatgagg aagaatcaga agggaagcca gagagcacca ttatcaccag aggatatacc   1380
aaatccagtc attcataagc tatttatttt gtgtgatttt aaacaatagc tgctatcggc   1440
tgggcacggt ggttcacgcc tataatcctg gcactttggg aggccgaggt gggaggatca   1500
cctgaggtca ggagttcaag gccagcctgg ccaacatggt gaaacctgt ctctactaaa   1560
aatacaaaat aaaaattagc caggcgtggt gtcgtgcacc tgtaatccca gctatttggg   1620
aggctgaggc acaagaatcg cttgaacttg gaaggtggag gttgcagtga gccaagattg   1680
caccactgta ctccagcttg ggcaatagaa caagactctg tctcaaaaaa aaaaaaaaaa   1740
aa                                                                  1742

<210> 989
<211> 1877
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> n equals a,t,g, or c

<400> 989
gcgtntgcgg tgtttatctt ccagccaaac gggwaaatag tcaccaggtt tggtagccga     60
ggaaatgggg acaggcagtt tgcaggtccc cattttgcag ctgtaaatag caataatgag    120
attattatta cagatttcca taatcattct gtcaaggtgt ttaatcagga aggagaattc    180
atgttgaagt ttggctcaaa tggagaagga aatgggcagt ttaatgctcc aacaggtgta    240
gcagtggatt caaatggaaa catcattgtg gccgactggg gaaacagcag gatccaggtt    300
tttgatggga gtggatcatt tttgtcctac attaacacat ctgctgaccc actctatggc    360
ccccaaggcc tggccctaac ttcagatggt catgttgtgg ttgcagactc tggaaatcac    420
tgtttcaaag tctatcgata cttacagtaa tggtgggcag gtggataccc gcttccatgg    480
tcttgcacta taaactggaa tggatttctc aatgcgggac cagattatga ctagagtttt    540
tatgccagaa ggaatcattg gtgaactttc caaggttatt tctgaatgta acaatttcct    600
taaaaatgac ttatccaatt tctgtatttc acctttaggg ttaaaaaaaa ctcttctact    660
gaatctataa aaactgcagt tttacatctg tgaactatgg cttaagggac aggatttatg    720
tagctaaact aattttgcaa atcaaacaga cacttaaaaa actagcatat gtaaaggtat    780
tcgttaatcc tgtgaatggt agcttttgca cagaacttcc aaaagcaaaa caaaaacaaa    840
atctattgta gttatatact tcatttaacc taggtcacaa gacccaggga atcttctaac    900
ctcactttta cagtaggtat tactcttgtg acattttttt ggttatcaac aactaaatat    960
aaattacttt ggaaaaagta aggctgtctt gcaaatgat cccagctctg attagcagcc   1020
ctctggagtt cagaacttaa gtatcagtgc aaatttctca acctttctgg gttagacaaa   1080
gatccttttt tgtgtgttct tttcaccacc cctttggctc accttgtatc agcaaacaaa   1140
gtacttcttc agggaaacct gaaatttcta atgccttgaa aagcatatta caaaagtaat   1200
gctacctttt gggaaacaaa ctgccccgtt aactccagat cattgcactg gaatgtaatc   1260
aagaaagtta gtcatgtttt atgtaccatg ttttcacacg tgtctcttct cttcgacttc   1320
ctgaaagcga aagctttacc tcctgcaaat gtcagcacat gtagtaggac accagtatcc   1380
taggacagag agccataagt agccctttgg aggactgatg gtgtcaacca aaggcatgtg   1440
attgattaat gattcccct tagaaagcaa gtgttaccaa agttgtgtta tcttgaaagc   1500
attacaggta agggcatgtt atggttattt atcattgttt aatgaatagt agaggtgtca   1560
```

580

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agggactatg tatacatgat tagggtaaga tagaatgtat tatatatata tatatataca   1620
cacacacata tatatagctg aatctttggt gtattgaaat aggcagcact ctgaaagaca   1680
gaagcttcgt ccagccactc ttcagcacat tcctttacta agcagtttaa agccgtccta   1740
gtggagcaag ccctaaagca gatttaattt ttgccatttt ccaagaatga cggtggtggc   1800
ttttagtcag aaaatggcct tctgtgcttt caaaaaaaaa aaaaaaaaaa ckcgagggg g   1860
ggcccgggac ccaatta                                                 1877

<210> 990
<211> 3013
<212> DNA
<213> Homo sapiens

<400> 990
ggtgtgtcct gctccccaat gacaggttgc tcagagactg ctgatttcca tccctatata     60
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ttacacctgc tgctttttgct gggaagctct tgagtgtgtt caggcaacct ctgagctctc    180
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581

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<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

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atcccccggg ctgcaggaat tcggcacgag gacatccagg aagagaacga aagttcccct     240
gttggttttc ccctattttt aagtgtgagt gtatgaatgt gtgttttgtt ctcttccttt     300
tatattgcct cctggatttg ggttgttttc ctttatctgt ccggactgta aatgtggata     360
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accccaatga cctgccaggg cacgtagaga gagcaggcta cttgagggca gggagtagac     600
caccgccatt tctgtgacct cacatctggc atggccaggc acacagtagg tactcaataa     660
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582

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<210> 992
<211> 3138
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<213> Homo sapiens


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<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (3138)
<223> n equals a,t,g, or c


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583

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<212> DNA
<213> Homo sapiens

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<220>
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<223> n equals a,t,g, or c

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<220>
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<223> n equals a,t,g, or c

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<210> 994
<211> 1848
<212> DNA
<213> Homo sapiens

<400> 994
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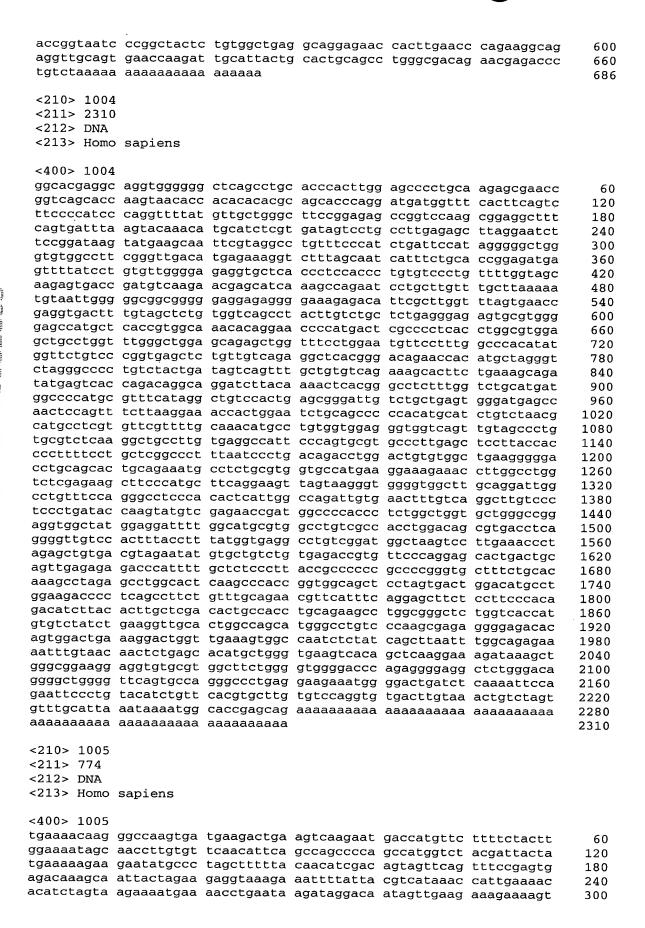
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<210> 995
<211> 740
<212> DNA
<213> Homo sapiens


<400> 995
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<210> 996
<211> 1015
<212> DNA
<213> Homo sapiens


<220>
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<222> (365)
<223> n equals a,t,g, or c


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tggaccctgt cctcagagct cctgggggcc gccctgctcc atcccagaac ttaaccacgc    600
tccctggaac actctgaagg gcctgtgggc aaaaaacctg ctggcctcct gttgcaactc    660
ttaatctgaa gtcctctgaa ctctaaatct gaactcactc cacctgtaag aaaaacggct    720
ccgctgcaaa ctggctggtg caatcccaag ctcaagctgg ggagctgctg cgtctgtggt    780
caggcctcct gctcctgcca gggagcacgc gtggtcttcg ggttgagctc ggccgtgcgt    840
ggaggtgcgc atggctgctc atggtcccaa cacaggctac tgtgagagcc agcatccaac    900
cccacgcttg cagtgactca gaatgataat tattatgact gtttatcgat gcttcccaca    960
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586

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gtgtggtaag aagtcttgaa taaacacttt tgccttcaaa aaaaaaaaaa aaaaa           1015
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<210> 997
<211> 1906
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (35)
<223> n equals a,t,g, or c

<400> 997
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accgcggtgc ggccgctcta gaactagtgg atcccccggg ctgcaggaat tcggcacgag     180
gtcttaacca tgctgttgga tttgcaagtc gaaccagtaa agctttcagc aacaaacaga     240
ctgtgaaaca atgtggctgt tccgaagttt atctggactg tttacagaca ttcttgccag     300
ccctcagttg tcccttacaa aaggatattc tcagaagtgg agtccgtact ttccttcatc     360
gaatgattat ttgcctggag gaagaagttc ttccgttcat tccatctgct tcagaacata     420
tgctcaaaga ttgtgaagca aaagatctcc aggagttcat tcctcttatc aaccagatta     480
cggccaaatt caagatacag gtatccccgt ttttacaaca gatgttcatg cccctgcttc     540
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agaagcagat gttgcggagg agttactttg ctttcctgca aacagtcaca ggcagtggga     660
tgagcgaagt tatagcaaat caaggtgcag agaatgtaga aagagtgttg gttactgtta     720
tccaaggagc agttgaatat ccagatccaa ttgcacagaa aacatgtttt atcatcctct     780
caaagttggt agaactctgg ggaggtaaag atggaccagt gggatttgct gattttgttt     840
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taatttccca tttaaaggtt tacaaatatg agtgtgtgga tgctttaatt catttaacct    1800
cactcctcaa aggtaacatg caacttagtt ctgttatatg agagtctttt tctttaatgt    1860
actggaaaaa gcctatgtga atctgttgat agaatttaaa attcca                  1906
```

<210> 998
<211> 1216
<212> DNA
<213> Homo sapiens

<400> 998

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attttttaatg tgccaaaaat ttgtacatgt tcaattaaaa atgttgtata atagtgtaat   180
acttttcttt gtatgaaaat gtcctcttct tcaaaggtat aggctttgta atgaattaga   240
ttttctgcca ataattgata tacaatttat attctttatt gtgcctgtgt gttaccatgc   300
taagaatgtc tttgtttaaa gggaattaat cttttttatga tgtattaatc tgtgtttttca  360
attgttttcc aagtacagtt caaataactt gcatatttac tatacaaaat ggttgacaag   420
tgttcttttt gcaaagactt gaatacattg gcagaggtgc taatcacatc ttccctaagg   480
cacctggaag aattatttga ggaaaaaatg agttttcaca ttgtttttata ggaaattaaa   540
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tgctatcttg tttgctggca gaagtgaatg tttggtgagg ttattttggg ataaattaca   660
aaagaaaaaa aattagacac tgcattaatt tcttgttctt ttggaatatc ttagtaactg   720
aggatcattt tctaacaatg tggttgacat accttcagtt gctttccaca tctaaaagag   780
ttatctttca tatatgtaca agttattggt agtcttattt ttgggctgtt tgttgactta   840
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atttatttac attgatgaat gggctgttga ataatcattg taaagcactt tgtatatata  1140
aggtgctata taagtgtgaa atatcattca tttataaatg aaatgccttc taactttaaa  1200
aaaaaaaaaa aaaaaa                                                    1216
```

<210> 999
<211> 1191
<212> DNA
<213> Homo sapiens

<400> 999

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ggcacgagcc ggccggacag actgacgtgt gagctgcatc gcgggaggcg catggcgggg    60
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acggcgctct acatgctgga gccctgggag cggacggtgt tcaattccat gctggtttcc   180
attgtggggga tggcactata cacaggatac gtcttcatgc cccagcacat catggcgata   240
ttgcactact ttgaaatcgt acaatgacca agatgcgacc aggatcagag gttccttggg   300
gaaagaccca ccctacgaag ttggaatgag accatcagat gtgataagaa actcttctag   360
atgtcaacat aaccaacctt ataaagacta aaattcatga gtagaacagg aaaatcatcc   420
tgactcatgt gttgtgttct ttatttttaa ttttcaaaga ggctcttgta tagcagtttt   480
tgtctatttt aacattgtag tcatttgtac tttgatatca gtattttctt aacctttgtg   540
actgtttcaa tattacccc gtgaaagctt ttcttaatgt aactttgagt acattttaat   600
tgccttctat tttttaaaact caaaatcatt agttgggctt tactgttctt gctattgtat   660
ggcatataca tctgcctgga tatatttcta ctcttgaccc aaagttttgt aaagaacaat   720
ataagatttc gggtaggggt atggggaggg aagatatttt attgagaact acttaacaaa   780
agatttatct gtaagcttga actcaggagt acagttttag ctatctagac tctaacagct   840
tttgctttaa aattattaaa gtgtttctta atgaaaaga aaagatcttg ctaaagttaa   900
aataaggaac atttcacctt ttaaatattt aattcttatg tggacttatt tccagaaaac   960
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ccatagagtt tttaatagaa gagaaatcca tttcctccga gggtcactat taacaatgta  1080
cttccttaaa tttagtttaa tgattgtaat gggtgctgca tttgcacatt gcattaagtt  1140
atgatgagac gaattgttgt taaaaaatta tagcaaaaaa aaaaaaaaa a             1191
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<210> 1000
<211> 1418
<212> DNA
<213> Homo sapiens

<400> 1000

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aatttcttag agcttagttt tgtggagaaa cagatgaggt gcagaggagc ggccagccag   180
gagctgctgt acttgtttag gtgtgagyta gcctcagggt gggttatgtg gagctgttca   240
tactgcagat atgacagggg gcctagctgc aagagcaggt gggagggctt cattccaggg   300
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588

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gcctcagtgt ggctaactca ggttgagrag agaagatcct gratggtaga gragsccagg      360
ttgaatacca tactcaaccc ttggaaggca gaaagcagcr agggaggtga ttcactacaa      420
tagctggggc agcagatttt gcggtgctga gtcccacctt tcagcttgat ggatgctcac      480
ctcttctcag ccccagctcg tgccctgttt ttctagccat agcccccaga ttactcacag      540
ctcctcatgc catttcctgt ccagattgct atgtatgact ctgacctctc ttgtccagtg      600
gtctggtgct cacctcctct cactgctaga atattcacca agggtttgca tttgggaagt      660
cccttaccag ctcctgctta gagctggtag ggccatacat gtccacactc ccaactggtg      720
gctctcccgc tgaatggggc ctcagcaggt gcccaagctg ctacaacctt ggccactctg      780
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tttcaagggg tcaactgaat tccccacttc ctgggtaaga agcatgatct ccttttaatt      900
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tcagctcatt taaatgtggg tctgcagaag gctttaggtc tcccccaacc cccttacctt     1020
tcacagagga acctttcatc aggataaatg attattgctg ccctgtgggt cttgctcaat     1080
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ccattaccag ctgggtcacc ttggatgggt ctgtcaacat ctaagcctca gttccctcac     1260
ctgtaaaaat gagggtagtc cctacctcat aagggatatt gtgaggatgg aaagcgaaag     1320
tgtgagaaaa tacctcccaa gtgcctggta catagtgggt gctaaataaa ccactttttg     1380
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<210> 1001
<211> 1854
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1851)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1852)
<223> n equals a,t,g, or c

<400> 1001
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cccccattgc attcagttta tctgtaaata taatttattg aggcctttgg gtggcaccgg      120
ggccttcatt cgattgcatt tcccactccc ctcttccaca agtgtgatta aaagtgacca      180
gaaacacaga aggtgagatc acagctctgc tgkcagagat tactagccct tggctctctc      240
gtttggcttg ggtattttat attatttctg tcataacttt tatctttaga attgttcttt      300
ctcctgtttg tttgcttgtt agtttgttta aaatgaaaa aggggttctc tgtgttctgc       360
ccctgtaatt ctaggtctgg aacctttatt tgttctargg cagctctggg aacatgcggg      420
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ccgtatcact ccaagtggag gctggcaggt ttttctgcaa gatggtccag aatctaaaat      720
gtcccattaa tctggtcact tgggtttggc tctgctgtat ccatctatag tggtagagac      780
ccaccagggc tcaagtggag tccatcatcc tcccacgggg gcctgttctt agcactgagt      840
tgatcgctcc atgggggaga gatcagacat tccttatcag agatgatgtg accttttctg      900
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gattagatgg taaacagtgt taacccatcc tttactacag aggcatctgg gtttgaatgt     1020
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tctggcaagt gtccagatgc cagaaccttc ttttcctcta gaagggatgg tgcttggtaa     1140
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aaccagtgaa tgcattagaa ccttccatag gaaaagaaaa ggggctgagt tccattctgg     1260
gtttgctgta gtttggttgg gattattgtt ggcattacag atgtaaaaga ttgactagcc     1320
cataggccaa aggcctgttc tagttgacca agtttcaagt aggattaaga ggttggttga     1380
ggggtgcagt ttctggtgta ggccaggtag gtagaaagtg aggaacaggg ttgcctcttg     1440
gctgggtgga gtctctgaaa tgttagaaga agcgctgaag ccttgattga tagttctgcc     1500
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589

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ccttgttgcc ctggggctta tctgattatg ggacgagggt agamagtaag aagcactttt    1560
gaatttgtgg ggtagaactt caacaataag tcagttctaa gtgctgtcgc ctggggacta    1620
gtgagaaagc tactcttctc cctcttccct ctttctcccc atggccccac tgcagaatta    1680
aagaaggaag aagggaaggc ggaggagtct ataagaagga atcatgattt ctatttagca    1740
gattggatgg gcaggtggag aatgcctggg ggtagaaatg ttagatcttg caacatcaga    1800
tccttggaat aaagaagcct ctctgtgctg aaaaaaaaaa aaaaaaaat nnct           1854
```

<210> 1002
<211> 695
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (602)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (677)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (687)
<223> n equals a,t,g, or c

<400> 1002
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ntgtgatccc cgggttamsa attctgaaca tggcggcggt ggtagctgct acggcgctga     60
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acaaggcttc tcataacagg acccgggccc tgcaaagcca cagctcccca gagggcaagg    180
aggaacctga acccctatcc ccggagctgg aatacattcc cagaaagagg ggcaagaacc    240
ccatgaaagc tgtgggactg gcctgggcca tcggcttccc ttgtggtatc ctcctcttca    300
tcctcaccaa gcgggaagtg gacaaggacc gtgtgaagca gatgaaggct cggcagaaca    360
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ccccgtcccc tgatgttggg tctggggtgc agacctgagg agcgctgcga ccctcctagg    480
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cagagggcgc atgaagccca ggctgttgcc aaaccctacc ctgccccaca ccaaggagcc    600
anccaaaggc aaataaagtt attgagtgtt tagtagaaag gaaaaaaaaa aaaaytccaa    660
ggggggggccc cggtaancca atttggnccc tataa                             695
```

<210> 1003
<211> 686
<212> DNA
<213> Homo sapiens

<400> 1003
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aaagattcct ccatgtcagg cagttgtaag ggtgattgct tcctctagga ggggacattt    180
cctgtttttct tagatctgac aagattcctc cctgtcccca actatcaaag tatccgtttc    240
cagcaagatg agattcctct tcagttaaac aaaacttgct acttttata ttttaaaaat     300
ctttatatat atatatatac acacacacac acacacatac atatacgtac acatttgcac    360
acatatatgt atatattttg aaaatttgct ggatgtggtg actcatgtct gtaatcctag    420
cactttggga agctgaggtt ggtgggtcac ctgagctcag gagttcaaga caagcctggc    480
caacatggtg aaacccatct ttactaaaaa tacaaaagtt agccgggcat ggtggcaggc    540
```

590

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accggtaatc ccggctactc tgtggctgag gcaggagaac cacttgaacc cagaaggcag     600
aggttgcagt gaaccaagat tgcattactg cactgcagcc tgggcgacag aacgagaccc     660
tgtctaaaaa aaaaaaaaaa aaaaaa                                          686


<210> 1004
<211> 2310
<212> DNA
<213> Homo sapiens

<400> 1004
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ggtcagcacc aagtaacacc acacacacgc agcacccagg atgatggttt cacttcagtc    120
ttccccatcc caggtttat gttgctgggc ttccggagag ccggtccaag cggaggcttt    180
cagtgattta agtacaaaca tgcatctcgt gatagtcctg ccttgagagc ttaggaatct    240
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gtgtggcctt cgggttgaca tgagaaaggt ctttagcaat catttctgca ccggagatga    360
gttttatcct gtgttggggga gaggtgctca ccctccaccc tgtgtccctg ttttggtagc    420
aagagtgacc gatgtcaaga acgagcatca aagccagaat cctgcttgtt tgcttaaaaa    480
tgtaattggg ggcggcgggg gaggagaggg gaaagagaca ttcgcttggt ttagtgaacc    540
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gagccatgct caccgtggca aacacaggaa ccccatgact cgcccctcac ctggcgtgga    660
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tccctgatac caagtatgtc gagaaccgat ggccccaccc tctggctggt gctgggccgg   1440
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agttgagaga gacccatttt gctctccctt accgcccccc gccccgggtg ctttctgcac   1680
aaagcctaga gcctggcact caagcccacc ggtggcagct cctagtgact ggacatgcct   1740
ggaagacccc tcagccttct gtttgcagaa cgttcatttc aggagcttct ccttcccaca   1800
gacatcttac acttgctcga cactgccacc tgcagaagcc tggcgggctc tggtcaccat   1860
gtgtctatct gaaggttgca ctggccagca tgggcctgtc ccaagcgaga ggggagacac   1920
agtggactga aaggactggt tgaaagtggc caatctctat cagcttaatt tggcagagaa   1980
aatttgtaac aactctgagc acatgctggg tgaagtcaca gctcaaggaa agataaagct   2040
gggcggaagg aggtgtgcgt ggcttctggg gtggggaccc agaggggagg ctctgggaca   2100
ggggctgggg ttcagtgcca gggccctgag gaagaaatgg ggactgatct caaaattcca   2160
gaattccctg tacatctgtt cacgtgcttg tgtccaggtg tgacttgtaa actgtctagt   2220
gtttgcatta aataaaatgg caccgagcag aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   2280
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa                                     2310


<210> 1005
<211> 774
<212> DNA
<213> Homo sapiens

<400> 1005
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ggaaaatagc aaccttgtgt tcaacattca gccagcccca gccatggtct acgattacta    120
tgaaaaagaa gaatatgccc tagctttta caacatcgac agtagttcag tttccgagtg    180
agacaaagca attactagaa gaggtaaaga aatttttatta cgtcataaac cattgaaaac    240
acatctagta agaaatgaa aacctgaata agataggaca atagttgaag aaagaaaagt    300
```

591

```
gtctggtact tcattagact tgtgtagctg tgtactgcat gagtaatctg ataatcatta    360
agattatatt aatttcttta aaaatagctt taaagaattc acagctatat atgtacccttt   420
tataaatctc tcattttgt  tttgtaagtt gacaggtcag taaaaattta ggcatatata    480
tttgtacata tgtgtgtgta tgtacatgtc tatgtgccta tatatgcatg tttttatatc    540
taaatatcta tttatatata catacaaacg tgtttattgt ttaaatgatg ttttaaatcc    600
cagttggaga agcatttctt gtaacaaact gattcttctg tatcaaacct ggaaaaaaat    660
catgaaccat ctgacatcgt gaacagtctg cagtgggcta tggtttcttg tcaagtctta    720
tttccttatc atcccattaa atgttgtcat tttgcaaaaa aaaaaaaaa  aaaa          774
```

```
<210> 1006
<211> 614
<212> DNA
<213> Homo sapiens
```

```
<400> 1006
cggcacgagc ttttgtctgt gttatctgaa cactctactt cctttgcagc cttagtcaca    60
caactgagtc atctcaagta ctctttaagg acacacagcc caggctgttc tgagtcagaa    120
taggcccta  caggtatatt ttaaaaactct tcgtaattct aatgtgtact gctggtatag    180
ctgaactact gacctggatc ttagtcctag ccttttttgct tttgcaattt cagtatcttc    240
atctctaaac tagggaaaca ctgggattct ttcttagctg tgggggaagg tatttggtta    300
gatgactttg aatgaataga ctgctgtgct gaaagagctt tatcacactg tctcaaagta    360
tgtaaagata cataggtgga tgctcttact gcagcagtca tgaatacatt tttagccatt    420
tacctaagga aaaaggcagt ttttctaggt accatgaagg aagattgacc ctgttggtat    480
gcctgtgggg gtgggatgtg agtgggactg ataaactgat acttttggtt cgtatgtaca    540
tactggaaga atcttcataa taaatgagac tacacaacaa taaaaaaaaa aaaaaaaaac    600
tcgaggggggg gccc                                                     614
```

```
<210> 1007
<211> 849
<212> DNA
<213> Homo sapiens
```

```
<400> 1007
ggcacgaggt ccatggcaac ctctttcctg aagttagggt gtatgccatc caggcctgat    60
tgtccaaaac acgtatctgc tttctccatg ccattgaaca tccttccatg gcctccattt    120
tatatggcta gaggatgttt ccttgcatag atgtattaaa atgtatttag ttatcttctc    180
ttgctgccct ttaggtgtat tcccttttt  ctctcatgtg aacatttttc acagatatcc    240
ttgtagctta cttaaccttc aggcacatac catgttgcat agatcataat ttcctaataa    300
ttagtgttat tccttggtca gatggcatgc aaaattataa gactttaaat gagtcttata    360
taccactact tacagtcact tatgatatta taatcactta tgataccacc agtgattttt    420
atttaattat ctgcttgtta gtacaagctt gttatgtaac atatttgctt gaagttatt     480
tacttctaat atatgctttg gttgttaagt aaaggagttt cttgaaatgc aaaaatttca    540
ctatttatac ttaaatgagg aaacagccat ttaaaactag agtgctgatg gatggtagtt    600
tttttaagttg gagaaaacaa atctgcattt agtgatccag tgaaacaaga cagttcatgg   660
ggatcaatac tcagctgaga ccgggtgcgg tggcgtatgc ctgtagtccc agcaatctga    720
gaggccaagg caggaggatt gcttttgcct gggatatcga ggctgcagtg agctgtgata    780
gcgccactgc actccagcct gggtgacaga gtgagagcct gtctccaaaa aaaaaaaaaa    840
aaaaaaaa                                                             849
```

```
<210> 1008
<211> 762
<212> DNA
<213> Homo sapiens
```

```
<400> 1008
ggcacgagga ttcctgttgg ctctaaccct caattaccta atcttatgct ttaacacata    60
actgcattgg atgtgagagt aacgtaccgt atggtcattg ttctatatat taacattgaa    120
cactgctgcg attgctcaag gacatttttat gttacggctt taaagcaaag gcatgattat    180
tagaaactat ttaagctttt ttctttgaaa aacaagctcc ttttacagaa tataaacaac    240
agtagtgcct gtggtttagc ccaccaatct tgatgactaa aagtagctga tgcattgtgc    300
atatgatgct tgagatggtt tttgcaaaag cagaaatcgc tgcaaggtaa tcacaataga    360
```

```
taaaagtggt attttaaacc tttgaaataa atggatgtaa ctgtaccttg gtacagcttt    420
tcacttgttt agtttttaaa cgttagtata atctgaataa ataaaatgtt gccaaattca    480
atgtagaaag aatgtgacaa cacaccttgg gtagttctgc ttgtgttttt gcatattgta    540
aaagcagtgt cacagctaaa aagaaagaaa tcgtttctaa cagtaaatta ttgtgcttta    600
gttgctagtt tgtactgaga gttgacctct ccctgtgcag ttttttgttc taaacttgta    660
taaataacaa ttgtgtaatg tgtctccctc ctacattgta acaattgctt cagcctacgt    720
tataaataaa gaaccactag attaaaaaaa aaaaaaaaaa aa                        762
```

<210> 1009
<211> 778
<212> DNA
<213> Homo sapiens

<400> 1009
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ggcacgagat ttcttgaatg aatttcacat ttgtaactat gattttggca gaatagaaga     60
ttggctcatc agtgaagcgc agtatcttag ctctagattc tattttcatg catcacagaa    120
gtgctatacg gttaggtctg tttgtgcctc agtcaagaac taagaaatag tatgaattgt    180
aagtcaagat gggcaactca gatggagcag cttagtctca cagtttgctt gtctatttat    240
tttatttagt gccaaatgta ttccatttta aaagtaagcc agagtgagtc aaggcatata    300
cacactttct cacaaaactt cctaaacaga tttggggggtt taatatgtcc aactcctcat    360
gaaatatatt caatccactt aaatatattc catctttta acataaaatg taaagcttag    420
cacccatcat taatttatgt ctctgttta tccagtggtt aaaaaaggat tctgcctctt    480
tagtcctcac tgttaaataa aacccaatca tagtaagtga ttaactagca aaaagtaaag    540
ctatttatag caaatttcta gatcattaga aaagcactgg tagttgtaca atatcagtgt    600
tgactttgaa cttctttaac gagatcatga attctttcc cttagccaaa acatgaaata    660
tttaacctag ttgtctctaa aagttttgta atcatgagtt agatatatgt catctcctat    720
tcattgcttt tatgtgatca ataaatcttt tacaaaccca aaaaaaaaaa aaaaaaaa     778
```

<210> 1010
<211> 1621
<212> DNA
<213> Homo sapiens

<400> 1010
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aaaaagaccc tggcattttt tcacatactt gaatccctaa atgcacctgt ctttcacttt     60
ttgagacaga ctgaatatat ctaaaatttc cagcaataaa aaaaaaagca tttaacttgc    120
accaagcaag aaaatataaa tacagttaac tgcattaaga taatcacgtt aaaattgtta    180
ctatgcagca cagaacttca ttcttatagt attcttgggt tcaacctttg aatcaatttt    240
accactgatt aaataaatga ctcaaagaca tctgtaagtc atgctgctgt gttttgaaag    300
tctttaacta aattaagatt gcagaatgat agtgattatt caattagatt ttaagtaagg    360
attgtgatat tagaggctgg aaatccttat tttttaaaaa atcagatagg cataaatagt    420
taaatcactt tcattctccc caaacctgta gttacagaaa aagtttatg ctagaggtgg    480
gatgccaagt tttcactatc catgaagcag cgctgcatgt cactaggtaa cacagatcca    540
tccagatggt gtttacattt gatttatttg ggatcttatt gacatcaggt atacttggaa    600
gacatttctt ttattcttca gcgtatgaat ttaaagctat tttttgtaaa tatttctaat    660
cagcgataat ttctacctat gttctcaacc aacttagcca gtttgttttt cagagcctgt    720
agtcttattg gaaatctatt ttatcagtgt gctttattga gtgtggattt tgcatacgtt    780
caaaacatta accacaaaat acagcaagtg cacctatatt caccattaac ttatatccca    840
agtccatttt ttcctgtaca ctacaaacaa aagatatatt agagactttt gaaaaatgct    900
gaaatacttt gcttcagaat tggaatgttt atattatgta gaaatcttca aaggtagcat    960
tattaaatag caaagaataa ttagaaccca catatctttt tttgtgtgga tggggaaaat   1020
gttttaaaat ccagttattt aatatgagtt tgagagagaa aattgttttt taaaaatata   1080
tgtgcattga aatgatggca atgcttatag tatgatcaag tatgaaagga actttaaatt   1140
cttatattta cttttctctc agtaaattgt taaattttca ctcagcaaaa gattggcatt   1200
tgttaagtgt tctatatta gtactaaaat cacagtcatg aaatcatagt cataaaatgg   1260
tcttcacaca gcagtcatcc gtgtcattta tcattttgta atattaaatt atggcaattt   1320
tatttcaaac taaagtttga acaccggaaa gtcattactc agtgatttgt aatttgggac   1380
ttggattatt tatctagaga tgtttgtata ttttgtcagt aactaatact gcgctgccat   1440
catggtgact gtcatggttc tacagaaatg ccctccatgt gtccctctaa tgttgcatgt   1500
ttcagtgggt tggaagtttt gtatatttat tgtattaaca cagagtgtca taaaataaaa   1560
tgctgtttac tggaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1620
```
```
                                                                     1621
```

                                    593

<210> 1011
<211> 962
<212> DNA
<213> Homo sapiens

<400> 1011
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ggcacgagtg accacccagc cctccggctg ctgatgtcat gagtaacacc actgtgccca    60
atgcccccca ggccaacagc gactccatgg tgggctatgt gttggggccc ttcttcctca   120
tcaccctggt cggggtggtg gtggctgtgg taaggagccc tcatatacac acagacaccc   180
acagctttgc taaggcaggg gctgggtggg cctggtccag tctgcacaga gtccccactg   240
tcctgttaag ggagtgaagg gtgtggaggt gggcctctct ctgcctgtgg gccttcctgg   300
gctcagcagc ccccacagtg ctgtgtctct gttgcaggta atgtatgtac agaagaaaaa   360
gcgggtggac cggctgcgcc atcacctgct ccccatgtac agctatgacc cagctgagga   420
actgcatgag gctgagcagg agctgctctc tgacatggga gaccccaagg tggtacatgg   480
ctggcagagt ggctaccagc acaagcggat gccactgctg gatgtcaaga cgtgacctga   540
cccccttgcc ccacccttca gagcctgggg tcctggactg cctggggccc tgccatctgc   600
ttcccctgct gtcacctggc tccccctgct gggtgctggg tctccatttc tccctccacc   660
caccctcagc agcatctgct tcccatgccc tcaccatcac ctcactgccc ccaggccttc   720
tgccctttgt gggtgttgag ctcaccgccc acccacaggc actcatggga agaggctttc   780
cttctgggat ggcggcggct ggtagacacc tttgctttct ctagccctcc tgggctgggc   840
ttgggcacaa atccccaggc aggctttgga gttgtttcca tggtgatggg gccagatgta   900
tagtattcag tatatatttt gtaaataaaa tgttttgtgg caaaaaaaaa aaaaaaaaa   960
aa                                                                   962
```

<210> 1012
<211> 841
<212> DNA
<213> Homo sapiens

<400> 1012
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ggcacgagct cgtgccgaat tatataggag ccctgcagtc ctaaccacag gagtggggcc    60
agggactttt tgtgcttggt taatttgggg ggtcatggag gtcagaggtg agatgcagcc   120
tgtccccaga gagccccatc ctccctctgc tcccgggcat gggcacacag gacaagtgtg   180
agtgtgttgc taggcagctg gacatgacat ggctgctctg gcagcttgtg ccacctcgtc   240
aggcaccgta tgtgttcctg cctgcctggg gagtccaaga gaggaagggg gcaagggagc   300
cctggagaat gtgcatcttc cccttttcctt agccttggcc cacctcgcca cacgatctca   360
gtcaagggcc tctcctcacc ccatgggctt ctatctcagc cttttccact ttggcaaccc   420
tgggggtgag agtgaaggcc tcaagatgcc tgtcctgtag gtatctctgg tgagcaaggc   480
cggggacatg ttacgggaca agctacaggc tgatttgtct cttcatagtg tagattgcag   540
agtgggacaa atgttgggct cctcttcctc ccttatggag gtagaatttg tgtgtgtcaa   600
tgcctgcacc tgagtgttca tcctgatggg cttttacatg tgtgtatacc catgtaacta   660
ctgctctgat catgttatag aataagggta tccaatcttt ttgcttccct gggccacatt   720
ggaagaagaa ttttcttggg ccacacctaa aatacgctaa cactaatgat aactggtgag   780
ctaaataaaa caagcaaaaa taaaaataaa aaataaagtc acaaaaaaaa aaaaaaaaa   840
a                                                                    841
```

<210> 1013
<211> 458
<212> DNA
<213> Homo sapiens

<400> 1013
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ggcacgagta ttttgtaac tttaaggtct aaatgactaa acttcaaagt aagattttgt    60
cagaataaat tgagaccatt aatctaatat aatacttgtt catgagcact gaaatcctga   120
agaggagaga tttggttata aattaaaaag gttgggtgat cttaagtgcc tcagttaatg   180
cacgtacagt attcatttgg ttggttgtac tacctctcag aagtaaaatt tgtcacctta   240
tggaatgaga gtttttgggt ttgggggttg ttttttgtt gttgcttggt ttggtatttt   300
tggtttttgtg tgtatttgta taaattttct gtataattag cccaggctga tgtaactata   360
aaaattagtt gaaaaaaaaa atattgtttc cttaatggaa ttctcacttc atttgaatat   420
```

```
aagattttgg atgaaaaaaa aaaaaaaaaa aaaaaaa                              458

<210> 1014
<211> 1537
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1424)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1426)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1433)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1440)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1476)
<223> n equals a,t,g, or c

<400> 1014
gcgtccgaga caccacccaa agagagcatt tgctgctgct tcccagaact gtccaacaat     60
accttagcaa caccaagagt tgggccctag atgggcccag cacattcaca ggtcacaccc    120
acttccctgc aaaacccacc ccctcccagc ctcctcctga ctctaagccc tcctcttcct    180
ctacctctcc agtgtatgtc tgtcaccccc catttcacca gagcgtcctt aggggctggg    240
ggtgggtttg ttaatggggt ggaggcaatg atgggttgga ggatcttggc tataggggct    300
gtgctgactg cagcaggtag gttgggtttc cctcttcctt ccctaatctt ggttctctac    360
cctcctttcc actcctcacc tgattctctc tcttcctcct ccttatatct gtgaggcaga    420
aggcatctga agctcatatt agcccccatt gggtgggaat taggagtggg tagttaactc    480
agggagactt gagataccct ggaaaaaatg ctattgagat gtcctgacat taggcagggt    540
ggatggaaca agaaggagca agaaaggaac ctcaggcaga tgttaggaca tggacttgat    600
catgtggcct gggagtttag aaatggggag agacatcctc ctagatcaga tcgtgggctc    660
agtaggcatg ttgattccca gggagaggtg ccaggaacag catggtaaag aatgtactct    720
tcacagctca catccccagg ttgctgatgc cactcactcc ccctctcctg ccatcgagtg    780
gccttgccgg acacatcacc ctacctaaaa agccagtaaa tgagaacctg tcagctatag    840
ccatcatttc tgagatgcga ttttctttgg gattgagctg cagtgggcag tggctcctta    900
cactgtaatt ttaattctct gcctgcccag cctctctgtc aaagtagctg gtgatctata    960
aagatgctaa aaggcaccag gggactttgc catttaaagg actcctgcag tgaattcttt   1020
tgtaaaatga atatggcacc ctaatttatc cactttctaa atttgggtcc atgggggtgt   1080
ccagggcatg cttatgtgct gtcaccagca gacaaacaga gggaatggaa tctgggggtt   1140
ccttccctgc tctcccgcca tactcaggat accctaccat aagtgatttc ctctcactga   1200
cttgcagaaa atgtgtgaga tacccagcaa gctaagaagg cagttttgct gggtatctca   1260
tacccaaggc tggggtttgg gtgatctgag aggttagctc cttgatccta ggatggaagg   1320
gagagcttat atagaagctt ttacttggaa ggttttgtat cctaaggtca gacatagcta   1380
tattaccaag cctaaatgcc atgtggccca ggaaataatt ggncntttg ttntaaaccn   1440
cttgtggtag gtattggtct ctctgcaact cagccnttaa ttagaaatta gactgagccg   1500
aataaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa                            1537

<210> 1015
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595

<211> 519
<212> DNA
<213> Homo sapiens

<400> 1015
ccacgcgtcc gcacgtggtt agtggcatct atattggaca gggcagatct agagagaatc   60
ctgtatctaa caattttaat tttttccct ttatgctgtt attccttacc tagagaaaca   120
atttccctcc aaagttcctt tgaggggtct gtttaggcca ggccaacaca agtgacctat   180
gtggatttta gcatcctttt tttgaaattt gaggttttat gaagcttgag tttttctgga   240
tatttttagt aatttgctgg tgtgtactta gctcagatac ttgattgcaa ctgtgttggg   300
tcaactattt ctaatgggac ttttccattt gcatgtacag tcactggaaa ctgctgggca   360
gagaaactct aaaaggtagt tggggcacac ttttccacc tgtcagattg gtgaagaatt   420
ggtgaggctg tggggaaaat ggcattctcc cactttgat ggatatgtat ccaaataaaa   480
gtcattccca tgctttctttt caaaaaaaaa aaaaaaagg   519

<210> 1016
<211> 1734
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (191)
<223> n equals a,t,g, or c

<400> 1016
gctgtgttgt tgagtgcaga gtctagggcc argtggaatg tgtcatcttg tgargaaatg   60
tgtttgtgtt gttttttact taaaaattgt cagcgtagtg gagagggaa tgacagaagt   120
aggaaggcac cccaccattg tgtagtgagg cagtatacag agaggtaagg cagccggggc   180
agatggctgc ngccctgcac ggggcttttt tctggatctg gttgcacgtg ctgtgttctg   240
agaggcgagg ttagagccca gatcatctct attcatgtga cacagccatt cccaaaagga   300
cttagagcag agggaacttg accccatct taactgtctc ttttgaggat gagcagagtt   360
ctcaggtgtg cccccagcct ggtttatata aatgtagctt taatctaggt gtgagcagat   420
gtctgttggg gatctctgga caccaggcct actctggagt cagagagggg acccgccatt   480
tggctctctg gtacatgtgg acagtgtctg ctcctctact tgtcatggct gaaagtactg   540
cagctgtcat gacattctct ggtgtagaag aaagaacttc ccagagggtt tcctggcact   600
gcggaaagac ccagaatgag ggargccctk ggaccacag aggcccctgc aggcatttca   660
gcacgcctcc ctccgctctc acttgttcct cagttctctc agaaatggag agaaatgacg   720
gtccttattc cttctttttt tacaggtggg cagatggaag agggtcgatg ttttgctcag   780
gatcacaaac agaggtcctg aggctccctc tcctcactag gatccaccct sccccaaagc   840
aaattttcct tttgcctgtt cactctgtga agagggctcc ttgccaagtc acccagcatc   900
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gtaacaggtg ttctcagcct catgaaaaac ccatgctagc tgtgacattg aattgctggg   1020
ctggcagaca tctgcggagg agcaaaaggc atatttgctw cttmctgcct ctgcgcggtg   1080
ccagaragct aaagtcatgg tctaacaggg ggagcatgct gtctgagaga atgktctgct   1140
agctttyaga tgcacaggkt tataaaaata ccaccctgsc atttaaaaca tgtttaaaat   1200
gttgatagaa aacaatgaat cgtatcctta gaaagacaga ccctagtgaa agaaacacta   1260
actcacacag gtaggtctа gcttccataa catttaagtt tattctatgg aattgttcat   1320
tggtgctcct gttttagtta cttctccata gacttgtttt tcccttgact aatcaatgcc   1380
atctggtgcc aggtggtatc ctgggtgtag cacagtgaca gggtggagac tgccctggcc   1440
gtggcatgtg caggggggcgt tcttgagcct gtcttctggg agccctttct tttccttttt   1500
ccctcctttа ggttgaagac ttcatcattc cctgcgggca gtttctctgt ttttcctatt   1560
ttcttttcct caagaaaaat gtaattttta agtaacagaa ttgktttctg tgttrcagca   1620
tttaagttgc tgagttgaga aatcatggct gagtttgcca agtaaagttt ttaaagcaaa   1680
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagggcgg ccgc   1734

<210> 1017
<211> 1908
<212> DNA
<213> Homo sapiens

596

<220>
<221> SITE
<222> (1868)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1887)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1904)
<223> n equals a,t,g, or c

<400> 1017
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cttttcttgt tcctttcgta gcctgcattt tccagtgtta tttgtacctg ttctacagtc      60
cagccaggac tatgaaggtg gtgcttatgc tgctctttat ttgcctgggc aacatgtacc     120
tgcacgggct gaggaacctc tggcaaatcc ttttccacat aggagtggct tttctgtctt     180
catatcagat actaacaagg cagcttcagg agaagcagtc tgactgtgga gtatgaggat     240
gacactgtga tgaatggatt ctttgatttt cttttgagga tcaatctatg tttctctttc     300
tgcttctcta ctttacactc cagtttccat ccttttcagc caactggact gaaaaaccag     360
gaattgggga tgttaaacag ttgcagtgga agtcatgagg ttgcttgata cccagccttg     420
gttctgtgcc aagcattact gcaggatctc cagccagttc agcacgttta cctaggacag     480
ctggatctgg gggctcatcc asaaagagct ttattggaag agagaaagga aatattttgg     540
tcttttaagt tgaatgatac agtaaaccac ttgattcaat aacactggtt ttagtcattg     600
agagttgtct ccaaggaacc actttaaaat ccaaatcagc tttcagtcta aacataactt     660
gattagtttt tttttcaga gggtcagtac aggatgaatt aaaaacctaa aaatatggtt     720
cataaatgta agctagataa attttgttta catttttttca atatcttagg ttcgatatac     780
ctttggaata tttaattata ttttggatat aaattggact tcatttaggg tgagggcaaa     840
cttaagctga gaaaatggtt aagaaatctg agtttattta atttatatgt aacctttat      900
agtggtggga ctgtttgggt acagagatgt tttatattta tttgcagggt atatccgaat     960
attttaaaaa ttaattgaat aaccagtact tctagatgat aagtttgtca gcatgagcag    1020
aaatgagaat ttcaggatta cttacaattg accacaacct ggagtaggtg aatgaacatg    1080
gattcagtgg cactttacag atccgcttgg gaggggctgc tgtcatcagc ctttttcagta    1140
gagctgagtg cctgttgttt taatgatgat gactactgta ccctgtgtac ctgttcccag    1200
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<210> 1018
<211> 513
<212> DNA
<213> Homo sapiens

<400> 1018
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ccctgaggta tttgcaacca ccatggctgg gtaaccaccg atcagcacag ctgtcccctt     180
ggtctcctgt atcccagtca ctagtcctcc ctggtccacc ccaccctcat cctcaggagc     240
cacagccatt tcttagaggg tttcaaaagg acagcctttg gcgccttttc cttctaacct     300
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aaatcggcaa cgcatttatt tacaccaagc ccttcccata aaacacaact gctgaagaaa     420
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aacctgaata ttattaccaa aaaaaaaaaa aaa                                  513


<210> 1019
<211> 1030
<212> DNA
<213> Homo sapiens

<400> 1019
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tatagacttt ttttggtaag gggctacttt tctattttg aggttaattc atgctagcta     300
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<210> 1020
<211> 1063
<212> DNA
<213> Homo sapiens

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<210> 1021
<211> 1749
<212> DNA
<213> Homo sapiens

<400> 1021
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598

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aaaaaaaaa                                                           1749

<210> 1022
<211> 138
<212> DNA
<213> Homo sapiens

<400> 1022
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aatttgaaaa aaaaaaaa                                                   138

<210> 1023
<211> 1985
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (310)
<223> n equals a,t,g, or c

<400> 1023
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599

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     1980
aaaaa                                                                 1985
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<210> 1024
<211> 1576
<212> DNA
<213> Homo sapiens

<400> 1024
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ccatgttttg cctttttttt ttcttttttgg ccaattcctt tttatatgtg cccacaacag      180
aggtggggag acacggagca ccctgggtcc ttcccagcgc tgctgggcag gccccgtctc      240
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acaaggatct ctctaaatgg gagggattga ggctactttt ctgccaagcc ctattaagta      420
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<210> 1025
<211> 2238

<400> 1025

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<210> 1026
<211> 1126
<212> DNA
<213> Homo sapiens

<400> 1026

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ctcctggcac aggagctaac cactgcccag gtctctaggc tcatctcctg ctgtacactc   360
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601

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<210> 1027
<211> 1141
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1125)
<223> n equals a,t,g, or c

<400> 1027
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gctctcttat cacacaccca cagaatgccg ctctcatacc gcaaaagcac tggcttgcca   180
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gttttactat gctggccagg ttggtctcaa actcctgacc tcgtgatccg cccacctcag  1020
cctcccaaag tgctgggatt acaggcatga gccactgcgc ccggccttag ggacttctaa  1080
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<211> 1580
<212> DNA
<213> Homo sapiens

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ttatacttct ttgacccaca caatggtagt agcttatggg agagtgttta tgttgtattt   180
aagcttgctt ttcattttt accaaattaa gggaagcaaa aatattaatt tataactcta   240
aattattaat tctgagtgat aaaaaagatt gttttgaaat ccacaaaatt taatttgttc   300
aacattatgg ccgctttaaa acatacagta gagttgaagt tattttacag taaacagtta   360
tatacccatc accttgattt tactactaac attttaccat acttgttggt taatacctat   420
ccttcattaa tctttccaac cacccatcaa tgcatcttat atctgatgca ttttaacata   480
agttaacaat attgaatagc caaaatgcca aatttaaaat atttagaaaa acataggtct   540
attttaaata ccctgcaata atggccaaaa gtcacatgaa ttcggtacaa gttctagcca   600
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602

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catacatatg tatccagaaa acaaaagcaa atcctacata ttttatattt cagtcgaatg      660
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atattaccgt aagattttta ttgattattt tatcttggct gactgtagag tctctcattt      780
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aataagaagt ctaaaaataa tttgatatat tgaattaatg cagtcaaaga ctatatttcc     1020
aatttaattt tgcagactca taagcaattt atcaatcctg ctgatacggt ttggatctgt     1080
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agatgttgct atacttcctg tagggcttgc agatccaaga gtcacttact cctctttttc     1440
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<210> 1029
<211> 2138
<212> DNA
<213> Homo sapiens

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aaggcgtcac aggttgcccc tagggcaggt acaccaggat tcagagcacc agaggtcttg      180
acaaagtgcc ccaatcaaac tacagcaatt gacatgtggt ctgcaggtgt catatttctt      240
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caaattatga caattagggg atccagagaa actatccaag ctgctaaaac ttttgggaaa      360
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caaccagcta tttcagagaa gactgaccat aaagcttctt gcctcgttca aacacctcca      540
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gatgagtata ataccaattt agaaggctgg aatgaggtac ctgatgaagc ttatgacctg      660
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa                             2138
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603

<210> 1030
<211> 2489
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (177)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (179)
<223> n equals a,t,g, or c

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<221> SITE
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<223> n equals a,t,g, or c

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<221> SITE
<222> (2378)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2486)
<223> n equals a,t,g, or c

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ctgaagaatc tccggagcga ggnaacagaa gaagaagaac cggaaagaaa ctgtcgngng     180
aagcccaaac cgnatgggcg gactgttgaa gtggctgagg gtgaagctgt tcgaacacct     240
caaagtgtaa cagcaaagca gccaccagag attgacaaga aaaatgaaaa gtcaaagaaa     300
aataagaaga aatcaaatca gatgctaaag cagtgcaaaa cagttcacgc catgatggaa     360
aggaagttga tgaaggagcc tgggaaacta aaattagtca cagagagaaa cgacagcagc     420
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gagattctac acttcaggtt tcttcaggat tgaatgaaaa cctcactgtc aatggaggag     660
gctggaatga aaagtctgta aaactctcct cacagatcag tgcaggtgag gagaagtgga     720
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caaaaagtga ttctgacaag agctcttccc aagtgccgcc aatactacaa gagacagata    1440
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604

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caataatttg tgaacatgta cagagtttta tataaattta aaccaatttt taaaacaaaa    1680
ctgcggacac caccataaaa atggaatcaa aagaaagtta atttatgaaa ttaagaggtc    1740
agcagaatat actcagtgat ggaagacact tgggaaagtc tttttaatag aacaagaacg    1800
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<210> 1031
<211> 1060
<212> DNA
<213> Homo sapiens

<400> 1031
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ccactctcag aagcattaat caaaccagag gaacttagaa ccttatcagt gtaatcttga     180
tattttgcat ctctaccctg tggacaagta ttttattttt ytccctttga gtatataatg     240
cattaatatt tcaaaggact ttgcaattaa acacagaaga agccatcttt agactcaacc     300
ctaatactac tttcagtagt gcagactacc ttccatttgg catatgtttg tatactgtat     360
acattttcat agttgaaatc atttatattc tgattctttg caccagacaa atactttcta     420
caaattatct tcatatcatt ttagtaattt gacatttcgt tgtgttactc atcttattcc     480
actcttgttg gacaagtgga ctgttacagt gatgatagct ttatggagta tttgctttta     540
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agcaagtttt aaaccaaatt ttatgtaata agtgtatcat agaattatat agatggaaag     720
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gcatggcggc gctacctggg aggctgggag gaatgtttga gcccgggagg cggaggttgc     960
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<210> 1032
<211> 3333
<212> DNA
<213> Homo sapiens

<400> 1032
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ttgatgatga agataaccct gttgatgagt atcagatatt kaaagctatc tttcaaacta     180
ttcaaaatcg taatcctgtg tggtatcagg cactgactca cggtcttaat gaagaacaaa     240
gaaaacagtt acaggacata gcaactctgg ctgatcaaag aagagcagcc catgaatcca     300
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tgtagtgaag agcttgtgtt cctcctagta gtggttccag aactggttca tgttatctat     480
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tcatgcaacc tggcactgga aaagaaatca gcgggatttt ggggtgggg gggatgggga    600
ggtaccttag agggagtatt ttctttattt tttgaagaaa gtaagatcct gactctgaag     660
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<center>605</center>

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<210> 1033
<211> 2020
<212> DNA
<213> Homo sapiens

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606

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actatgtaaa aaaaaaaaaa aaaaaaaaaa aagggcggcc                          2020
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<210> 1034
<211> 747
<212> DNA
<213> Homo sapiens

<220>
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<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

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<222> (20)
<223> n equals a,t,g, or c

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<222> (63)
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<222> (105)
<223> n equals a,t,g, or c

<400> 1034

607

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gacgccatcc acgctgtttt gacctccata gaagccccgg gaccgatcca gcctccggac     180
tctagctagg ccgcgggacg gatacaattt cacacaggaa acagctatga ccactaggct     240
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ttcccgggtc gacccacgcg tccggactag ttctagatcg cgagcggccg ccctttttga     360
atgctttcta atggttttcc tccttaagtg tcaagttaac aattttaacc ctatccagca     420
atactccctt ttccctctga aatccagtgg cacatgttct atttctctct tttgtatgcg     480
tggtttatat ttttgtcttg gtgtggttat ttgcacacat gccatacttc taaaacccag     540
ctgtttggtg cttttcttag agtccttctt tttccctgtg ctgatgtatg caggattcgg     600
gaactcttca tgaatagcac acactttggt gagaaattta gacttacctg aagattctgt     660
ggaacaggtg gagaggattt tcttttcttt ttttcacttt taataacttt cactttagga     720
tgattttaaa agtgaaaaaa aaaaaaa                                          747

<210> 1035
<211> 735
<212> DNA
<213> Homo sapiens

<400> 1035
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cctgcaaaaa tcaaaggggg gtggtttcag agctttcgga tgcagcgctc cagtgctcta     180
tgggatgaaa attctttcat cattttact ttcctgctgt tttactgttt cccccaattt     240
taagcttctc ctggcccacg caaagcatgt cctccctgcc ccccaccagt agaccaaagg     300
ctaaaattta aaagagtctc tttttcccact ctgcagaaaa agcacctggc ttgcaaaaac     360
aggtaagtta tgagacatag gtcattttttc cttgtttctg actttttcct ttaaagatcc     420
atttaacagt tacatatagg ccgggcgcgg tggctcacgc ctgtaatccc agcactttgg     480
gaggccgagg cgggtggatc acgaggtcag gagatcgaga ccatcctggc taacacggtg     540
aaaccccgtc tctacaaaaa atacaaaaat atagctgggc gcggtggcgg cgcctgtag     600
tcccagctac tcgggaggct gaggcaggag aatggcgtga acccgggagg cggagtttgc     660
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aaaaaaaaaa aaaaa                                                       735

<210> 1036
<211> 1723
<212> DNA
<213> Homo sapiens

<220>
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<222> (1675)
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<220>
<221> SITE
<222> (1680)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1682)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1684)
<223> n equals a,t,g, or c

<220>
<221> SITE
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<222> (1694)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1696)
<223> n equals a,t,g, or c

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<221> SITE
<222> (1709)
<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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tccccaggaa atgatcttcc acttgagcaa ccttttactt gatacgattt gcacctttct   180
gttttcctgc agtcaggtg gtggcctgca gggacctgag ctttgctacc caaccagatt   240
cctcatagag attcctaatc actagtttct tgtattcata aactcagaga tacagagggc   300
ttggtttgaa gttggggtga gatgaaacct ttgctctgag ccaaagctct ggggccttgc   360
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ggacagggtt ttaaccacaa ataggagcag catgcaattc ctagtgactt gctgcacagt   540
attgtatcat aattacagga agtttttatt tttaaaactg gatctggggt atattcattt   600
gccccatcac ctctgtctaa aggcccaagt cctagggctg ccatggtcac aagcacactg   660
atgctcctta agattgttta tctggagccc acatagtgtg gaacaaaaag tcacctagaa   720
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catgtggacc ctttttttcc ttcagtttaa cttttctgga gcagtgtgct gcgtagttcg   960
gcctgagttt gtgcagcttg ttaagacaac tcttgtgtac gctatgttga agctcaacaa   1020
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gtttgttggt tgtgccaaac actttatttg ggaaaggaaa gcccagattt gaatgggtct   1140
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cctccctgtg ccctctcagc tctgaggctg ccgtctttc ggggtgttcc ttttggcaaa   1560
tatacactgt aatcttgagt ctaaatttat atgttgaaat gctacctttt ttaaaataag   1620
aaactaaata aaattatttt actatcaaaa aaaaaaaaaa aaaacccgac ggggngaccn   1680
cntncccaac acgncaaaa cgtacgccna cacagnggga acc   1723

<210> 1037
<211> 1054
<212> DNA
<213> Homo sapiens

<400> 1037
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ggattttatg ctgggcatag tgatttcgtg cttattttac tgctggacca aatgggaagc   120
aaaggaagtg tgtcaaagaa ggtggagggt tagaaggtac catctgagta aaattagctg   180
aatttccctg acttccatat tcttccatta tttctcttat cccctgccag tcactttagc   240
ctgaattagc tgtgaggcaa actattttgc tatttctatg tgtggatctt ccagtgtgac   300
tttatgcagt cattgaaatt gtcttaagca caaatgaaac ctcatggaaa tgttaattac   360

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tgctcctaca attaaccttc ctcatatatt caacaagcaa ggaattattg agaactaata      420
cctctgagac actactcctt agtaggttcc aaccaggaag gaggcaagtt gaatagagtc      480
taagtttat aatccagatc aacacagaga agggtactgc tctggtattg agggtgggag       540
tggtcagaga aggcctcctg gaaaggttag gcctgctgaa tcttcaagaa caagcagcag      600
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taaacattgc ctttgcttgg tgaagaaact gtgtgagctg tcctgacctg gacgatgacg      840
tggggaaacc ctccacctcc ttgcaggctt gttgcctgtt gaaagaagga aaaagacacg      900
gcgctggcaa gtgataggaa cattctggcc agaggttaaa gagcaggctg acatggctgg      960
ccattaagct ttataaaatc atgtgggctc tgaaattgtt cttttatgtg tctagcaagt     1020
atttaataaa cccttgtata gtaaaaaaaa aaaa                                 1054

<210> 1038
<211> 1401
<212> DNA
<213> Homo sapiens

<400> 1038
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tagccattat tccaaagatc ccgagttcct ttattggaga atgatattag acacaaagat      180
gtgggtacta agtatactcg ttgctgttgg ggtgttaatt gcttctaggg cttcccaaga      240
cagagctagg aaatgaaagc atacataata acccatgcat acacacagat caatatctat      300
gcctgtatct atctgtatac atactcatgt gtcctttcta atccacacca cggtattcat      360
cctaaccttc ccttttatt tttaactttt ttcctctgat agtgagaaaa taggctctca      420
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gtgaggaaca gatttactaa ctagaatcct gtatttgtgt gcaatccttt ttatctttat      540
tataaatata gcacctccag gctcctttt attagtgtca gcatgacata gcttttccca      600
tcttttact gttaatattt taaactcaaa aaaagcaagg aggaaaacag tatgctacta       660
tctgtgtgaa aatggaaaat aagtatggat atatttgctc atatgtatat atataatatc      720
tatgggagag ggaaaaccaa aatatcagtt tggaggtcaa ctgattaact ggggaaaaga      780
gatgagggga aaacttcgct gcatactcta ctatcgttga aatttcttaa acttttcat       840
tgagtataat tcacaaatca taaaactcac ccttttaaag tctacacatc agtagttttt      900
aacacattta tatacaaagt tgtgtaacta tcatcactaa ttccaggaca ttttcatcac      960
ccttaaaaaa aaagccatgt acccattagt agttaattcc catacccctc acccctcact     1020
cacccatcta ctgcccttca caagaccctg gcaaccacta atctgctttc tgtctctatg     1080
gatttgccaa ctcttgatgt ttcatataaa tggaatcaca caatatgtga ccttttatgt     1140
ctggcttctt tcacttaaca tcatgttttt aaggttcatc catgttgtac catggatcag     1200
tactttgttc cttttgtag ctgagtaata ttacattgta tgtatatacc atattttgtt      1260
gatgtactca ttagttgact gttttctaa attttttgaat tatgaaaata tccattcaaa      1320
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tgtaaaaaaa aaaaaaaaaa a                                              1401

<210> 1039
<211> 1447
<212> DNA
<213> Homo sapiens

<400> 1039
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caagtttttg acttcctaca gtcagtttca caaatccaca tactgtacat tcataggtga      180
ggttaagcct gtcacccatt tctttattc tataattaca caagcataat aaatacatct       240
gattttaaag gtcacttaaa atgagtcata atttacagta cagtacgttt cagttcaagt      300
gcaaaaaata actatttgct gaattctatt tctttcagtt attttatttt taagctgtgt      360
tttattgtga agcgagacat ccaagtgtag aatttcttat cccaaatgca gtattgggca      420
gaactatggt gtcatggaga agccctcact ttacaattga tcctgtctaa tcagggtcag      480
agggtaaggt gagttgctca tttcgactgt tcttttcttt cctctctctc ctgtgctcat      540
ccacagctat tataaattat ataattcacc tttattcagc taaaacagtt ttccctttc       600
cacactcccc ccaggtttcc tgttaacctc tgctttgatt tttagtggca agctttacgt      660
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610

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gcgatccacc cagccattgt tctggctgca gttgtaacgt ttgcagttgc atacattaca    720
ttgtccagtg tctgactgtg tcttcatgag aacgaatata ctgagatttt ctttctttag    780
tcattggaaa gtatagttgc tactattgc catccttccc attcatggtt tcctatttac     840
cacctttttcc tcaccaaaaa caaaacaaaa ctgacccaat atgtaatttc taaaaattgt   900
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ggaactctta ggaattcagt gatttttgtg tgtttcattc cctcagctaa ttagagcctg   1020
aattactata agatagtaaa tagcgagaga ggctatttac agtatcaata tatttagtaa   1080
actcttgtct atcaaaacac aggatactga gttggttggt tgatttgaaa taatcgcttg   1140
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tactttttaa atatatcttg taattttttta aacggttctc tccaagaaaa aagaaagtat   1440
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<210> 1040
<211> 1821
<212> DNA
<213> Homo sapiens

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gaagttcttg ccagcttccc aacctgcatt aggtttcatg tttcactcta aaataaaaga    180
atatgttaga aatgcttttg agacttcttc gtgctatctg ggcaaatgtg tttctttggc    240
attttttattt tactaactct atttcctcta tatgatgcta atttagatag agtgacactg    300
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actcattcag cataattgtg tccggactat gtctccagca cagcctttct tatatctttta   420
atgttctgtg cagtatagac gtactaatca gaggtgattg tctcaatcat tactgctggg    480
cctttatgca tcctgtattt ttctttcagt gcctagatat tgcattagtc tctcaagcac    540
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gttcctatat tcacatgatt tatactgcac acctggggag ctcttaaggg tcttattaga    660
atttgtggat tttatttttg taaaaaaagg aaaggattgt cttttgagtt tgctttctcc    720
tgtgtagaat tccattatga ctaggggact tctgaatctt atgtacatat ggtaattata    780
tatcaatgta tgccagtcta ggcagagcta tcaaaatatc cccttttgata ctaggagaat   840
catataccac cttgcgaata aacatgagtm ggtttcaact catctctttg ctttatcgct    900
ctttagaaag gatccttctt aactggcttt tattatattt ttctatataa gagaaaacag    960
tttaaagtaa aaagactatg acaactagaa tggaattttt tcatgtttct gggagagcaa   1020
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agtgaagttt gacttgagtg ttggtttttag cccagtactt taagaaagag aatatcccaa  1140
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gcatgggtca gaggctttgg gactaaatta tctcattaca tgtactgggg cctactaag    1560
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ataggaaaga ttttaggact gcaggtcata tggtttccct actcaactct cattgtaggc   1740
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aaaaaaaaaa aaaaaaaaaa a                                              1821


<210> 1041
<211> 3168
<212> DNA
<213> Homo sapiens

<400> 1041
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611

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catttgatct caggagaatc gttggtattt catctgaagg aaacttgaac acactcagct        300
gtgaccccgg tcacagtagg gggttctgtg gagcaggcgg ttcatcatcc cgacccagtg        360
ccgggagtca taagcagtgt ggcccatcgg tccacccaca cagcagtcac agcaatagaa        420
actcagctga cgtggaaaac gtcagagcca aaaacagttc aagtacctct agtaggactt        480
ctgctcaagc agcttcttca cagtctgcta acaaaacaag ccccttgtc ttagattcga         540
acacagtgac tcaaggtcat acagcgggca gaaagtccaa aggggcaaag cagagccagc        600
acggcagcca gcaccatgcc cacagcccgc tggagcagca ccctcagcct cctctgccac        660
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agcgcaaggt gaaaccacct aagaagcaag aggaaaagga gaagaaggga aagggaaagc        960
cacaggaaga tgagctgaag gactctttgg ctgatgatga tagctcctcc accaccacag       1020
agacctccaa ccctgacaca gaaccgctcc tcaaggagga tacagaaaag caaaagggaa       1080
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aactcttaaa tattaagaaa gaaatcccaa cagatgtgaa acccagttca ttagaactac       1200
catatactcc ccctttggaa agtaagcaac gtagaaatct cccaagcaag attcctcttc       1260
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cagctgcccc ctgccccttt gtggcccggg gcagctacag cagcatcgtc aacagcagct       1620
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cctcgctccc gggcaagaac ggcaaccca ctttgctgc agtcacggct ggctacgaca         1740
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gccttggcat ttcacacgct cctgttgaca gcgatggctc agacagctcg ggtttgtgga       1860
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ccacatcggt cctcggtaac accagcggcc tgtggtccac cactccattc agcagctcca       2160
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aaacaaacaa acatagtggg ccctcgtcta gatcatgatg tgccagtttc tgagacatct       2460
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gtacttgagg tatgtaacat ttgtatacct gaacttattt taaagatgaa ctgaaatgca       3060
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<210> 1042
<211> 1302
<212> DNA
<213> Homo sapiens

<400> 1042
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aagtattata gacccaaggg acttcttatg aggtcaaatt cagatattta tatgaatatg        120
aaataccatg gtccctagta gtcagttgaa gtggcaatgt ctaaacagaa atgaacaaaa        180
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612

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ctaatgctag caggttaaaa tcaatcaaaa tgtttaaaaa ttgattctgt cctcagcatg    240
ttacttcctc agctctgata atttactggt cttgagtatt ttgagaattt gatgttgaac    300
gttataaagt caaagaactg cttgtttaga tgaggtttat ttttattttt gatattattc    360
attcttgtca cacatcaaga agaaaacact agagtgctgc tggaattcca aatctgaaga    420
attctaacga ctgcattctt tgttattaaa aagggcacaa tccttccttt ttatttggca    480
gtttaatttc agtaggaagc atgtcacatg tgcactgttg gttagaatta tgcatctgtc    540
atgcctgact gctgaaccct acctaagcct tttggcgcag tttaaaactt atactggtgg    600
actgtgaacc tcaaaacaaa tgggtatttt tgggttttga ggatagatgt tactccttaa    660
agtttgtatt tggggcatga aaaactactg aaagaagaaa agtgctacag atactacatt    720
tcaaagagtt ggcattttcc ctttggccac tcaagcagca tttgatgtat ctaaagaaac    780
aaagtcattg tttattttaa aaaattatat gcagttgtac aagatactac attccattga    840
aatgttggct atgtcctaac caggcaacca gataacaaaa acattttgag tcttttatct    900
aggtagttct aattattcag ctacttagtt taacaaagga aaatatcctg acttctctca    960
tttcatttgt agactttca ttgtataggc acaaccaaag agtcagactg gtttaaaact   1020
ccagaaggaa aaaagtatc ccacacagtg gatgttgttt ctaagaatgc tacaaaatcc   1080
tgacatctca gacatctcaa tgttaaagga agaaaaaaaa tacctttca tttcaaagaa   1140
ctaatatact ttgatattgt gtaaacctta ctcaagttta ttgtcaagct ttaactgcct   1200
ttttagaact ttttaaaatt tcgagcccac aaatctattg tattagttgc cttctataac   1260
aataaatctt cactgagcaa aaaaaaaaaa aaaaaaaaa aa                       1302

<210> 1043
<211> 1158
<212> DNA
<213> Homo sapiens

<400> 1043
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aaattagttg atttacatgg agatcaaatc cctgtccttg gactcagtaa tatgttatgg    120
ttaagttaac aacttggcaa agaacttctt tctttgtctc atagttacag tacctctgta    180
agaagagctc tgctggtcga aacaaaaata atttccattg agaaaattta agcataaaag    240
ctatgaatca ccgttaatga tatcagaata aaatactgga ttttcacagt taatttgctt    300
gttttgtttt atcagtatga tcgccctgga gcatcccta agaggaatca tgatggagaa    360
tgcacagctg cccccagtga gtcaggagtc tcacactggt tctttgctag acagtagtaa    420
tattgttatt gttagttgta ttatgataga aatatgtagt taaataagct acatataata    480
gtaatatata aatgttatag tagtaacagt tgcccttgta aaacacaagt tttaactgca    540
ggcacctatt atacacagat ttttgttttc aataagtata ttggattctt tttctggaga    600
ttgtcacaat ttgaaaaaac tcccagttga accacatagc ctagaaatat tgaaaaagtt    660
aaggaagccg ggtgtggtgg ctcacacctg taatcccagc accttgggag ccgaggcagg    720
tggatcacct gaggtcaggt gttcaagacc agcctggtca gtgtggcgaa accccatctc    780
tactaaaaat acaaaaatta gctgggcagt agtggccctc acctgtaatc ccagctactc    840
aggaggctga ggcaggagaa ttgcttgaat ccaggaagca gaggttgccg tgagcacaca    900
tcgtgccact gcactccagc ctgggcaaca gagtaagact ccgcctcaaa aaaaataatg    960
tttagtggga cccatacgaa gtgtcactag tgacgctgga agtgctccca aagagcagaa   1020
aaaagtcata acatgacaag aaagagttga actgcttgat gtctactgta gattgaggcc   1080
ggcagctgag gttgcctgcc atttcaagaa aaatgaatcc agtgtaagga acattgtaaa   1140
aaaaaaaaa aaaaaaaa                                                  1158

<210> 1044
<211> 2046
<212> DNA
<213> Homo sapiens

<400> 1044
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gaagagtttg tttgaaggtc tcgcgagatc gagtgagtac ggctcgccaa gttggagcgc    120
tctcggatta gacacagcaa ctattcagct gcgaggggac gggagaggtg gtgagcactc    180
tcgcgagatt tgaaggagcg gcggaggcca gagggaggag aggtttgtaa actaggaggc    240
tccgggtttc cgggcacttt tattaggtcg tcttctgggc caccagtgcc ccttccatct    300
ccacaggcag tccctccatc gctaaccttt ttttaaccgg ccttttagga ccggaagtcc    360
ttcatctcaa gcatccaatg ctgaaagcgg cctgattttc tctaccggaa gccctttcc    420
agaggctggg aacacggccc acctagcagg aagtcccacc tccttgagct ccgccaccct    480
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613

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tcccgaagtt tttctgtcac ctgtgttagg ctccgtcccc tttccgcgtt ttatccccgt    540
accagaaaag gatacattta gtgcctccca cccagctcca ctaaacgggt tggatatctc    600
attctttgag ttggtgttcc ttccccggcg cccccatgta gctgggaagt gggacctggg    660
ggtggttgga cccctgggat cctaaaggag gggcagggag ggcgcagaac tccgcttctg    720
ctccttgcta ccaggacgcg cggcctcctc agcctctttc ctcccgctgc catgcaccct    780
gcagccttcc cgcttcctgt ggttgtggcc gctgtgctgt ggggagcggc cccgacccgg    840
gggctcattc gagcgacctc ggaccacaat gccagcatgg actttgcaga ccttccagct    900
ctgtttgggg ctaccttgag ccaggagggc ctccaggggt tccttgtgga ggctcaccca    960
gacaatgcct gcagccccat tgccccacca cccccagccc cggtcaatgg gtcagtcttt   1020
attgcgctgc ttcgaagatt cgactgcaac tttgacctca aagtcctaaa tgcccagaag   1080
ctggatatgg tgccgctgta gtacacaatg tgaattccaa tgaacttctg aacatggtgt   1140
ggaatagtga ggaaatccag cagcagatct ggatcccgtc tgtatttatt ggggagagaa   1200
gctccgagta cctgcgtgcc ctctttgtct acgagaaggg ggctcgggtg cttctggttc   1260
cagacaatac cttccccttg ggctattacc tcatcccttt cacagggatt gtgggactgc   1320
tggttttggc catgggagca gtaatgatag ctcgttgtat ccagcaccgg aaacggctcc   1380
agcggaatcg acttaccaaa gagcaactga aacagattcc tacacatgac tatcagaagg   1440
gagaccagta tgatgtctgt gccatttgcc tggatgaata tgaggatggg gacaagctgc   1500
gggtactccc ctgtgctcat gcctaccaca gccgctgcgt ggacccctgg ctcactcaga   1560
cccggaagac ctgccccatt tgcaagcagc ctgttcatcg gggtcctggg gacgaagacc   1620
aagaggaaga aactcaaggg caagaggagg gtgatgaagg ggagccaagg gaccaccctg   1680
cctcagaaag gaccccactt ttgggttcta gccccactct tcccacctcc tttggttcct   1740
tagccccagc tccccttgtt tttcctgggc cttcaacaga tcccccactg tcccctccct   1800
cttcccctgt tatcctggtc taataacccc ccacacatac acctctggtg acctatttgc   1860
acagaccgtc gtcttccctc cagtcttctg agggataggg gacattccat cccaagcttc   1920
tcccttaccc acacctatcc ttttgagggg ctttgggtg gagctggggc aagcagaggg   1980
actgggtctt cacttcttgg gctaataaaa ttgtttcttt gtggactaaa aaaaaaaaa   2040
aaaaaa                                                              2046


<210> 1045
<211> 1590
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (981)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1083)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1124)
<223> n equals a,t,g, or c


<400> 1045
natttcctct cctctccagc tccgacattg tgctgtaaac acaggcctct gccttgaaca     60
catgtttgcc agatgctccc tcttactcat ttcttttctc ttgtttactg ccaggttttc    120
tcaagtgcgt ggtcaccagc catggcctcc atttccttag tctctaccct gtatcctctg    180
cccgctgggt cctactgctc aacctctccc tggctgctaa atccaatagt cttttctctg    240
tccttacctg cagggcctca tgggactatt tggcaatact gaccacagga ttgtctcata    300
actcgttttt gctttggctt ccatgacact ctggcaagct tagttcttcc tccttttctg    360
gcttccatac cagctgttaa atgtgagtgt tttggtactt ggccttctct tctctctgta    420
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614

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tgttcccctg ggctctgcta taaacttcag tgcatctggt tctcagtttt ttatacttgt      480
tatttgtctt ttgacgaaaa gcagatcttt ggagtttgac tcaagcctgc taggtccacc      540
tgagcagcag aacagctctg gctgggtaac ccttgaattt tcatgtgttt cttgatgtgt      600
ttcaaagaag agctgggatg ttgatccttc ttatcgctgc acccatttat ctcagggcat      660
gttgagtgac tcagctctct tgcagtgtaa acccaagagg agctcatggg tcattcctgg      720
gattcagctg cttctacagt ccgtgtcact cattagaggc aagctatgtt ttgcctagac      780
ttttgcttgt actttggctt gggaaaccct ctgtggcatc ctgtgggggt aggtctaatc      840
ttttcgactg tgtggaaggt caattcaaaa gtgagacgta acttcttaga tcacgtacca      900
tattttcctc ttgtgtgtac agctgctctg gggctcagct acagttacct catgttgaat      960
tgcctgcttt tgagttgctg nattctggtg taggtgtaat ctggttattt gaactttact     1020
gatattacsa agagctttgg ggattttttt ttaaagaatt gagatgggtt attctgaacc     1080
atncatattt aatscccgat tcttgktaga attattaaca gtanttcttg gaagagagtt     1140
ttctttggag gataaarctt tttttttttt tttgaggcag agtcttgctc tgttgcccag     1200
gctggagtgc aatggcgtga tcttggctca ctgcaacctc catgtcccgg gatcaggcga     1260
ttcttgtgcc tgtagtccca gctactcggg aggctgaggc aggagaatag catgaacccg     1320
ggaggtggag cttgcattga gccgagatca tgccactgca ctccagcctg ggtgacggag     1380
caagactccg tccccaaaaa gaaaaaaaaa aaagctatgt aaaacaatga cagccacgac     1440
gacagcagca ccagcagcat tcagtcgatt gtgtatttca tttgggcaat tcaattggca     1500
ggtgtagttt tgcgttttgt agtctctgtt ttctgactta aaactttgtt taagtgaaac     1560
ccagacaaaa aaaaaaaaaa aaaactcgag                                       1590

<210> 1046
<211> 1711
<212> DNA
<213> Homo sapiens

<400> 1046
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catcttgatg ccactaagct gctacttcaa gctttggcca tcaatagctc tgagcctctg      120
accttttga gcctgggaaa tgcttacctt gctctgaaga atatcagtgg ggcacttgag       180
gcctttagac aggccttgaa attaaccacc aaatgtccag agtgtgaaaa cagcctgaag      240
ttgatccgct gtatgcagtt ttatcctttt ctgtacaaca tcacttcttc tgtttgcagt      300
ggtaattgtc atgagaaaac cctgggacaa cagccatgac aaacagaaat attttggaca      360
actcacagtc actggatgct gctgaagaag agccctctga gagaggaaca gaggaggacc      420
ctgtattctc tgttgagaat tcagggaggg actcagatgc ccttagactt gaaagtacgg      480
tggttgagga gagcaatggt tctgatgaga tggagaattc agatgaaacc aaaatgtcag      540
aagaaatact ggctttggtg gatgaatttc aacaggcatg gcctttggaa ggctttgggg      600
gtgcactaga gatgaaaggg cggcgtctag acttacaagg aatacgggtg ctgaagaaag      660
gtccccagga tggagtggcc agaagctctt gctatggaga ctgcagaagt gaagatgatg      720
aagcaacaga atggattaca ttccaggtca aacgtgtaaa gaaacccaaa ggagatcata      780
agaaaactcc tgggaaaaaa gtagaaacag gtcagataga aaatggacat cgttaccaag      840
caaacctaga gatcactggc cccaaggtgg catctcctgg gccacaagga aaaaaacgtg      900
actaccagcg tctgggatgc cccagcccgg acgaatgcct caaactccgc tgggtagagc      960
tgactgccat cgtgagtacc tggcttgcag tttcttcaaa aaacattgac atcacagaac     1020
acatagattt tgccacccct atacagcagc cagcaatgga gcctctttgc aatggcaatc     1080
tccccacgag tatgcatacc ctggaccact tgcatggggt ttccaaccga gccagcctgc     1140
tctacacagg ggagagtcag ttaacagagg tattacaaaa tctcggcaaa gaccaatatc     1200
cacaacagtc gcttgaacag attggcaccc gattgccaaa gttttggaaa agaaccagac     1260
gtcctgggtc ctctccagca tggcagccct ctactggagg gtgaaaggcc aaggaaagaa     1320
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cctgattagc ctggccaaca tcttgcacaa tgccaagctc tggaatgacg ccgtcatagt     1440
agccaccatg gcagtagaga tcgcaccaca ctttgctgtg aaccacttca ctctgggcaa     1500
tgtctacgtg gcaatggaag aatttgaaaa agcactggtg tggtatgaat ccacattgaa     1560
gcttcagccc gagtttgtcc cagccaagaa ccgaatccag accatccagt gtcacttaat     1620
gctgaagaag ggacggcgct ctccttagtg cacttcttcc ttctctcttt ctcttgactc     1680
atgctctaaa aaaaaaaaaa aaaaaaaaa a                                      1711

<210> 1047
<211> 2764
<212> DNA
<213> Homo sapiens
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615

<400> 1047

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tgatcttaaa gaggatagat tttcagcagg attgctaact ggtcctggct atgcctgttg     180
cgtgctggcc ctggcacatc agttaatttc cttgaagctg tcttccacca cctaggaagg     240
ggcaatggag atgggcctgt cttaattacc ttgaagttgg aatgggaggc tcagacaatg     300
gattttgtaa acaacagtgt tgtgcagttg ttatatctga agatggtcat gaattctgct     360
gacagaaatg agactttacc cagaagcaac gtgtgaaggc atgggaaggt ggtggcccat     420
gtaaactgta cattgcttgt tttttggtgc aagcctcctc tgcctttatc ttacttcctt     480
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gaagcactat tgtgttgcaa tctctcagcc tgacaacaga ccttaattct cattttcaaa     600
ataactatcc aagttttcag ctagcagatc ccctccccca cccttctcat cccatttccc     660
cttgcacttt tgtttcccca agtgacaggg gctgggcttg ctgatggggg tgtctgagtc     720
agaaccagct caaaagaggg ggccactccc agggagggag tccaggaata gggtggggca     780
gtgaacactc accccaggca cataatttaa gacagcacca aaagctcagc agtgggataa     840
attatatttt aacataacac ttaaaatatc aaaattatca gcaccacagg aaaggtaaca     900
aatacaatat cggaatgaat acaggcagtc cctggtgaag aaaataacac gaccataaag     960
gaagacaggc ttgggccgac tgattttccc tgttgccctg ggccctgata catacggctt    1020
gtcaccacac agctactcat cctgccatta gttaaaagtt tcatattttg gtcatcatag    1080
attttgtgcc ttgatttgga cttttaaaaa tattgcattc gaatattatt tcccctggtt    1140
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tgccactggg tggcccttgg ctgaacattg gagtccttgt gctcagtgac aggcagggta    1260
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gagatggggt ctcgctgtgt ctcccaggct ggagtgcagg ggcctgatca cagttcactg    1440
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acaggcatgt gccaccatgc ccactggctt ttttactttt tttgtagaga tggggtccca    1560
ctgtgatgtc caggctgtgc ttttctgctc atctgtccag tgaagggctg gccatgtcct    1620
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ccagttgagt tttgacatgt gtgcattgcc aattcaaagt gcaggcaaac ttggtgggga    1860
tgaaaaggat ttgatattgg ggtcagtaca gtgaatgctg gagtcggcct gagtgtttgt    1920
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tactccctgc cccccatagg attgtgataa catggacatg aggttggata acctggacat    2040
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tcctaggaaa gtctgcttcc aggccccaga gtaagtcctg gaaagtgagc accactgggc    2160
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cccgacacta ccgagcggag agagaaagga acgtggctca tgagttcatt gaaatgaaat    2460
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gcagatcatt tgagcccagt agttccagac cagcctgtcc aacatggtga aaccccatct    2580
ctaccaaaaa actacaaaaa ttagctgggc gtggtggtgt gcacctgtaa tcccagttca    2640
ggaggtgagg tgggagaatc gcttgacccg ggaggcggag gttgcagtga gtcgaatcgc    2700
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aaaa                                                                  2764
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<210> 1048
<211> 1019
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (833)
<223> n equals a,t,g, or c

<400> 1048

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aaatttaata tcaatccatt gacaggactc tttgtgtact gagctatata gtaatttcac       180
cttaatagaa gttcttcata accaccccat ataaaaccat ccattcttat ctctttttt        240
tttctccata ctgcttatca cagctgacac tttatactga ctttgtttcc ccctctatac       300
cctttactcc agattataaa ttctgaggac agggtctttc tttcactgct ttatattccc       360
actgcctaga atagtgccta acatatatta ggtactcatt atatatttat tgatgtcaaa       420
tattgattgc tgtattatag tagtgttaat ggaaggtgtc atttcttaga ttttctttc        480
tgaccagcac agttcttggg ttgatggagt atgtcctcaa taaatctcag catcaaataa       540
acaagaattt tctttttaat acataaattt gtcattttgt tacgcttttt agtttcctca       600
gtgatttttt agaataattc ttgttcatga atttgggatc agtgaatatc tacagttgga       660
atcttaggaa ggaatgttaa tgggcaatcc agaatgttgg ataattaaat cagttatttg       720
ccatttgatg tgtaatatag tggaccacat ttagacaaaa aacaagctac cccataagac       780
cagtttttat tttctttgat tcatgtcttc aggattttct gttaactcag aantattata       840
gcattcatta ttgttttgtg aaaatactag ttaataatct ccggttaatg aaataattat       900
cttagataaa tttactgaac ttaatgtaga atatgttttt tgtttcgttt tgttttgag        960
cctgggcgac aagagtaaaa ctccatctca aaaaaaaaaa aaaaaaaaa aaaaaaaaa        1019
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<210> 1049
<211> 1279
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1188)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1224)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1278)
<223> n equals a,t,g, or c

<400> 1049
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gaattcggca cgagtcatga agggcttctt cctcattgtc ttcatgttga gtagggctga        60
ggaggaggaa gatgaggggt tagtcttgct gtcttgcggg tgacagatgt ggaagtaaat       120
cctcatgtag gtgggaatga gcagttcaaa cctatgttgt tcaagggcca actatagttg       180
attaactcat atctctacag ttaatttca aacagatgtg atagctgaat gagaacttt         240
aagatagtac tggacagtaa ccttattgga actggaatgg cctttagact ttttgtgtcc       300
agttcttct cacctcctct ttctcttcaa atgtgcaact gaaactgaga gacctcagtc       360
ccatgtccaa ggtcaggcag atacttagcg gcagagtgag gactccagcc catttctgca       420
gctctgctgt gcagtggaag atttgggaca agtacattat ttaaaaatgc ccacccacta       480
aatattacat tcctaacttt tcccaataca caaatatgct tgaacttta aaagcttgtt        540
tttggtcgtg cttggtttgg aatgtgaatg actaaaacta cctttagcaa tttcccaaag       600
tgtaagttca aatgtacaga gaattttttt cctgaatgcc caacacaata tgcagtttta       660
caacacatac cagattctta gattcatttg gtgaaggaag cctctgaatt aaaactttta       720
aatatttctg atttgcaacc agacgaaaaa gaagaaaatt gacaactttt ttgatgcaac       780
tttgtgaaat catggtgttc ctggtttttc tggtctggtt tttgttgttg ttttgttttg       840
ttttgccaca gtttagttcc tcacctgatc tttccttgta tccacttcag artctctgaa       900
atgttatctg tttgttggtt cctgggaaat tgagagcctt tycaaagact ccatctagaa       960
gcatatttaa aagtgtgaaa gaagacattt atgcgaccaa caaacatatg aaaaaaagct      1020
tatcatcatg ggtcattaga gaaatgcaca gcagaaccac aatkagatac catctcatrc      1080
cagttagaat ggtgatcact aaaaagtcag gaaaggccag gggcggtgac tcatgcctgt      1140
aatcccagca ctttggggagg ctgaggcggg tgggatcacc tggaggtnca ggagtacaag      1200
accagcctgg ccaacatagt gaanccatc tctacttaaa aatacaaaaa ttagctgggt       1260
gtggtggcgg gcactgtna                                                    1279
```

<210> 1050
<211> 724
<212> DNA
<213> Homo sapiens

<400> 1050
aaaacacaga actcggatga aacgtcacac ggtctgggct aaagatcttg ctctttaatt   60
tcccagcagg taaccttgtg gcagtcacta accctctcta cacctcaatg ttctcatctg   120
taaaatggaa atgatgaccc ctgggtctcc caggaccgtg aggggtcctg aaagggcagg   180
tgtgcgcggt gctttgtaga tgataaggca tctcagaaac accggggctt tactgttatt   240
ttctctccag cttgtttggg cagacaaaag agaaatcgag cccagtcatt cttagcacag   300
ccaagaaggg cagatttcaa aaggagcctt gcttcaaact gaggaaaacc aaaaaggaaa   360
aaacaacaaa cacagctgcc cctaccctcc agtccacaaa acagtctgtg tctgacaagc   420
tgggctctgc cagcggctca cccccagact cctgcaccag ctggccttcc tgacctgtgt   480
gccctgggag ccaggccgac tcttcacact tccagtcacc gacacagtgc aatgcaaccc   540
attcttgctc aaggcctcct tagaaattat tcctcccatt gctcgaacct gggagttgga   600
gattgcagtg agccacgatg gtgccactcc actctagcct gggtgacaca gtgagaccct   660
gcctcaaaaa aaagaaaaga aagggaggg gagggaaggg aaaattaaaa aaaaaaaaa   720
aaaa   724

<210> 1051
<211> 859
<212> DNA
<213> Homo sapiens

<400> 1051
ctgggaggcg gacgttgcag tcagctgagg tggaatgact gcactctagc ctgggcgaca   60
gagtgagact ctgtctcaaa aaacaaaaac aaaaacaaaa tttaaaaata aattgaagta   120
gggtacagga tttttaaagtc ccattatcaa cacattcaac tcagaatagt taatgtaacc   180
tgaatttaat tacctttgat tttaatttag gaatgaattt tttaaaatgc atataaccag   240
ctcagggtct gtgcttcatc atctccctgg cttttttttt gtgctaattt ttcctcttac   300
tacttttatg agtaccagaa aattatccaa agctaagaga agaaataaaa cactgttttt   360
gctccttatt aataatttgc ttctaagttt ttgttagaga gtaggtaaaa acgtttggca   420
aagtagattg ctcatagagt ttagctatcc atgctttgtt tttaccttta gtttagtttt   480
atggcagggg aataggactt gttgaaggga gtgggaaaga agggatgcag gtcttcataa   540
taaggaatgt cggccaggcg cagtatctca cacctgtaat cccagcactt tgggaggcca   600
aggcaggcag atcactaggt caggagttcg agaccagcct ggccagcatg gtgaaactcc   660
atctctacta aaaatacaaa aaattagctg ggcatggtgg tgcgcacctg taatcccagc   720
cacttaggag gctgaggcgg gagaattgct tgaacccagg aggcagaggt tgcagcgcgc   780
tgagattgtg gcactgcact ccatccagcc tgggtgacag agcgagactc tgtctcaaaa   840
gaaaaaaaa aaaaaaaa   859

<210> 1052
<211> 1932
<212> DNA
<213> Homo sapiens

<400> 1052
gttattttgt taatagtttc ttttgctatg cagaagctct taataagttt aatgagatcc   60
tgatatgttt aggctttgta tccccaccca aatctcatct tgaattataa tctccataat   120
caccacatgg agagaccagg tggaggtaat tgaatctggg ggtggtttca cccatgctgt   180
tcttgtgata gtgaatgagt tctcacgaga tctaatggtt ttatgagggg ctcttcccag   240
ctttgcctgg tacttctcct tcctgccgcc ttgtgaaaaa ggtgcattgc atcccttttca   300
ccttctcctа taattgtaag tttcctgagg ccttcccagc catgctgaac ttcaagtcaa   360
ttaaaccttt ttctttataa attactcagt ctctggtggt tctttatagc agtgtgaaaa   420
tggactaatg aagttcccat ttatgaattt ttgcttttgt tgcaattgct tttgacatct   480
tagtcatgaa atcctkgcck gttctaagtc caggatggta wtgccwaggt tgtcttccag   540
ggttttttcta attttgtgtt ttgcatttaa gtgtttaatc catcttgagt tgattttttgt   600
atattgtgta tggaaggggt ccagtttcaa tcttttgcat atggctagtt agttatccca   660
gtaccattta ttgaaaagac agtctttttcc ccattgctcg tttttgtcag ttttattgat   720

```
gatcagataa tcatagctgt gtggctttat ttctgggttc tctattctgt tctattggtt    780
tatgtccctg tttttgtgcc agcaccatgc tgttttggtt aacatagccc tgtagtatag    840
tttgaggtca gatagcctga tgcttccagc tttgttcttt ttcttaagat tgccttggct    900
atttggcctc ttttttggtt ccacatgaac tttaaaacag ttgtttctag ttttgtgaag    960
aatgtcattg gtagtttgat agaaatagca tttaatctgt aaattgcttt gtgcagtatg   1020
gcctttaat gatattgctt cttcctatcc atgagcatga tatgttttcc attttgtttg   1080
tatcctctct gatttctttg tgcagtgttt tgtaattctc attgtagaga ttttttcacct  1140
ccctggttag ttgtatttta ccctagatat tttattcttt ttgtgaaaat tgtgaatggg   1200
attgccttcc tgatttgact gccagcttgg ttactgttgg tttatagaaa tgctagtgat   1260
ttttgtacat tgatttttctt tctaaaactt tgctgaagtt ttttttatta gcagaaggag   1320
ctttgcggct gagactatgg ggtttttctag atatagaatc atgtcagctt caaatagggga   1380
taattttact tcctctcttc ctatttggat gccctttatt tctttctctt gcctgattac    1440
tctggctggg atttcctatg ttgaatagga gtcatgaggg agggcatcaa atctacacat   1500
atcaaatact aaccttgaat gtaagtgggc taaatgcccc acttaaaagg taaaggggggg   1560
caagctgaat aaaaaagcaa gactcaatgg tatgctgtct ttgagaccta tctcacatgt    1620
gatgacaccc atcggctcaa aataaaggaa tggaggaaaa tctaccaagc atgtagaaaa    1680
cagaaaaaag caggggttgc atcctaattt cagaccaaac agacgtcaaa caaacaaagt    1740
tcaaaaaaga caaagaaggg gccgggagtg gtggctcaca cctgtaatcc cagcactttg    1800
ggaggccaag gtgggcggat tacaaggtca ggagatcgag accatcctgg ccaacattgt    1860
gaaaccccat ctctactaaa atccaaaaaa aaaaaaaaaa aactcgaggg ggggcccgta    1920
cccaatcgtc ct                                                       1932
```

<210> 1053
<211> 1302
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (158)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (749)
<223> n equals a,t,g, or c

<400> 1053
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agctggcatc aggggccggc ctggaggtca gcgtgcaggg cccgttcctg agtgtgtccg     60
tcctgctgcc tgagaagttc ctcacccaca cccacggcct cctcgggaca ctcaacaacg    120
accccaccga cgacttcacc ctgcacagcg ggcgcgtncc tgccccagg caccagtccc     180
caggagctgt tcctgtttgg ggccaactgg accgtgcaca atgcgtcctc cctgctcacc    240
tacgattcct ggttcctggt ccacaacttc ctgtaccaac ccaagcacga ccccaccttc    300
gagcccctct tccccagtga gaccaccctc aaccccagcc tggcacaaga ggcagccaaa    360
ctatgtgggg acgatcattt ctgcaacttt gatgtggcag ccactgggag cctgagcacg    420
ggcactgcca ctcgggtggc ccaccagctg caccagcgtc gcatgcagag cctgcagcca    480
gtggtgtcct gtggctggct ggccccacct cccaacggac aaaaggaggg caacaggtac    540
ctggcgggtt ccaccatcta cttccactgt gacaacggct acagcctggc cggggcagag    600
accagcacct gccaggctga cggcacctgg tcctcaccca ccccgaagtg ccagccagga    660
cgcagctacg cggtgctgtt gggcatcatc tttgggggcc tcgcggtggt ggcggcggtt    720
gcgctcgtct atgtgctgct gcgccgcang aagggcaaca cgcacgtytg gggtgcacag    780
ccctgatggg agcagcttgg ctgtgagcac caggccaaga ctcctgagaa caggcagccc    840
agtcctgcga ctyccgcatc cccaggacca gacacctggg acctggatac ttgatacctg    900
ggcatttaac cccctactct gtcatctcag accccaggca ggaggcccag tgttccaaca    960
cccaagcccc gtgctagcag cgctccgtgc tcttccccaa atactcacgg ctctaattcc   1020
ccaaacctga aacttcatac cctgggattc taatacctat gtcctgagcc ctgacactcc   1080
cacacctgag cctcagattc caatarctca ytccctarar cctgackccg gggcccctga   1140
cccctgarcc tyarawtcca atacctyact ycccagagcc tgatgccggg gccctgacc    1200
cctgatctac ggaggcctgc tcccggaccg tgcgggcacc agtgcagagc tgccttggtt   1260
cctggacccc tgggcccatc ctgggacccc agatggggta ag                      1302
```

<210> 1054
<211> 545
<212> DNA
<213> Homo sapiens

<400> 1054
```
ggtgaaatag taccttgagt ttaaatagaa tgcatttagg cattgtagag atctgaaata      60
gttttcttcc actacattgt tgaaatcaat gaagcaatta gtttctcatt cagaaatgtg     120
cacactaata tttagttttg ctttctcgtg gataatatta agcacttact ctgcagtttc     180
ctggaagttg tgtcaactgc agtgatacta ttcaggatgg tgggaaatcc ccaaaaatat     240
gtatgtgtgg gcttgcttag attactatat ttcatagtta atcttttgtc tcttgcggtg     300
ctcatgatgt gtggggcaca cggaaggcat tgctgtagtc agtcattttg gttttcttct     360
atagccattt tattatttta gtgtattagt tatgaagata atattatcta tttgtaaatt     420
gctactttgt attttatgca tgctctgtaa tttgattttt ttttagttat tgatttggat     480
tatattcaca ttctaataaa cagttatagg gggaaaaaaa aaaaaaaaaa aaaaaaaaaa     540
aaaaa                                                                 545
```

<210> 1055
<211> 1141
<212> DNA
<213> Homo sapiens

<400> 1055
```
ggcacgagtc tgcatcttga tgatcggtgg taggatacac agtttataaa cgaacctgag      60
gctaacaaat actgtcactt ttcttaagtt tacacagcct attggtggca gatctgggat     120
atggatctgt tcggtttcag agccctgctt tcctttcact ggaatgtgct cttcgcttta     180
gccctttttt ttttttttttt ttggtttctg ctagccttta tttgagaaaa tttacacaaa     240
aatccccaat gcaacattta caagtgaatc tgtataaatc ccatatgcct gtttcccaaa     300
ctgaaaaatg gctttatgac aggggtccat gacaatggta taaaaatact tacttaaact     360
gcatcattct catttatatt atacagacca ttttggataa tatgctcaaa agtggaggaa     420
agcacataac acccctgttt tttaagatta tttgctcttg tatcagtctt ttgtcaaagg     480
caaatacttt tacttcttgg ataaaaccaa ggtataatat caattaactt ttaaaccaaa     540
agcacaaaat gtcctagttg atagtttttgg catgagtaaa gggaagggac atgagagaac     600
atcagctcct acaaagctta agtttagggt cacacttggg aacaaaagca tcaacaaaac     660
aaaatattct cttctcctat cttcttgaca ttttgtcaca tcagaagaac ataactaaca     720
gagtagcttt cattgctcct gaaaagggga aaggcaccag tcagaaatag gaaagaaat     780
cttgttaggt taatggtaca tgatagaatt tcacattaaa aagtttaatg atggaggatg     840
ggcgtagtgg cttacactgt aatcccagca ctttgggagg ctgaggtcag tggatcactt     900
gaggtcagga gttcaagacc atcccggcca acacggtgaa actccatctc taccaaaaat     960
acaaaaacca gccaggtgtg gtggcatgca cctgcactcc cagccactct ggaggccgag    1020
gcggaagaac tacccgaacc caggaggtga aggttgcagc aagctgagat agcaccattg    1080
cacttcagcc tgggcatcgc agcaagactc tgtcccaaaa aaaaaaaaaa aaaaaaaaaa    1140
a                                                                    1141
```

<210> 1056
<211> 656
<212> DNA
<213> Homo sapiens

<400> 1056
```
gagccagcgt ttaacgttca aaaggcaaat aactgatgac caggcggcac attgttctgc      60
tccgtgagtt ctggcactgg gaaaggtgta gattgtctag aatgacagca attccgacgc     120
cccagtcagt cctgcgtgat tgtggcgagg gcgcgtctgg caccgggaag gtgtagatca     180
tctagaatga cggcgattcc gacgccccgg tcagtcctgc gtgattggcg agggtgcatc     240
tgtcgtgaga attcccagtt ctgaagagag caaggagaca gattcccgcg tagtccaagg     300
cattggctcc cctgttgctc ttccttgtgg agctcccct gccccactcc ctcctgcctg     360
catcttcaga gctgcctctg aagctcgctt ggtccctagc tcacactttc cctgcggctg     420
ggaaggtaat tgaatactcg agtttaaaag gaaagcacat ccttttaaac caaaacacac     480
ctggctgggc tgtaaacagc ttttagtgac attaccatct actctgaaaa tctaacaaag     540
gagtgatttg tgcagttgaa agtaggattt gcttcataaa agtcacaatt tgaattcatt     600
tttgctttta aatccagcca accgtttctg tcttaaaaaa aaaaaaaaaa aaaaaa        656
```

620

<210> 1057
<211> 798
<212> DNA
<213> Homo sapiens

<400> 1057
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tgagcgcgtg gtgctgatac cgccatggtc gcgggcttga tccccgcacc ggccctagtc       60
ccagtttttt gttggtttgt ttctttgttt tctccccatg aactgtttct gcaactcttt      120
ttcaaaatgc gcctttcagg ttctgtaagc cccatgcggg caggagcgac ttgcgggatc      180
tcttggactc ggcccagagg ttgtcgagga cagcctggca gggaggagcg ggagaaaccc      240
ggccagcgct ggggcggtgg ctcctccccg gagtccccgc ggctggggca aagcggaagg      300
cagccagagg cgcgcgggct tggcgaggaa tcgctcgtgg acgggcgcga acgtggagcc      360
cttttatacg ctccaggggc actgtgccgt cgggcggccg gttagctcag ttggtaagag      420
cgtggtgctg ataacaccaa ggtcgcgggc tcgactcccg caccggccac ggcgttagct      480
tttttttttt tttttccc gccgccaccc cgccatgaac tctttctaca acagtttgtg      540
aaaaatgcgc ctttcgggta ctgtgagcgg cgtgcgggta ggagcgaact gcaggatctc      600
ttggtctccc cgcccagagg ttgtcgaggg cagcctgctg gggagagcgg gaggtaccag      660
gcatgcgctg gggcggtggc tccgcacccg agtccctgca ccctccgcca cctgcaggcc      720
actcaggata tccaaagcga tccacatctc cagcctgggc aacagagtga gaccgtctcc      780
aaaaaaaaaa aaaaaaaa                                                    798
```

<210> 1058
<211> 1221
<212> DNA
<213> Homo sapiens

<400> 1058
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gcacgaggtg gattccagag aagaaagtag atgggagcaa gtgtccaata cagcaacagc       60
tggaaagaaa aataaagaat tttgttcttt acctaaaaca cttcagttaa ctaagtgtga      120
gtttaaaaac taaagacttg agaactttat cagagttaat aagaacgaga aatatgtatg      180
tacatttaca atacaaaatt actatttaat aatttacaca tggcattaat tctaattgtg      240
tttaaatatc agagcttttt caggcttcat tcatgtaatc aacagccaca tgctaaggta      300
ctcgaaccag cagtggaatt acaagatgaa gatggcatgg tccacctctc aacagtcata      360
agctataatc taaaaaacag acaggcaggc aatgtctata tagagtcata tataccatga      420
cagatataga gcagggcact actggaacac agagaaggga catctaccca cttttatgtc      480
atatcatggg ctttctggtg gaggagatac ataggttgat acctgaagga caaggaaaag      540
cttcccagat agaggaaaga ggcaaggcaa agagcctgag gtaaggaaga gccctgcaga      600
gttccactcc atccagtttg gtgctagagc aaagggcaga gtgcagtaag cggtgagaaa      660
caagactgag taacttgaca agaatcacat tgacatgggt gtttttattt catggtgaaa      720
aatttggaac ttttcctgag aacaagtgta agccaatgac acagttaatt agaggagatt      780
taaaatgtca cctgtcaagt gactgcttat gaagggttat tgctcagcta agtatttctg      840
aatgagtctt aggtctgttg gccttcaatc tctaccaaaa ccctgagaac ttgatgatgc      900
ttttgttttc tgagaatcgt ttcagtgtgc tggctgacag ttccatgagg atggcaaaac      960
ttaagaaagt gtagagccaa tgaaaaagag atgcacagac atcttgggaa ctgtttaagc     1020
tttggaacat gatgaattta tggtgcataa gtacagtctt ctctgtgaaa gttttttgttt   1080
tcacatcttt cattagatgt gtgtaagaaa aaaaatattg atgtagtatc tactaaccca     1140
agaatgaaaa ggaatgccat ttgctattta cactttattt ctaaaataaa cctaaattta     1200
attaaaaaaa aaaaaaaaaa a                                                1221
```

<210> 1059
<211> 438
<212> DNA
<213> Homo sapiens

<400> 1059
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cggcacgagc cgacatctac tgcgagaact gcaagaccac gctcgggtgg aaatacgagc       60
atgcctttga gagcagtcag aaatataagg aaggaaaatt catcattgag cttgctcata      120
tgatcaaaga caatggctgg gagtaatgtg cgaactttcc cttctccttc gaatgctgtt      180
ttgtgaaaga aactgtgaat gtaatggaaa cgtaggagca tctggtgaca gcctttcttg      240
ccctctgacc tcaaaggcta gctgcgcata gctcttgaca ctcccggcca tctctgtggg      300
```

```
taaggtgtcc ctcggatctg tcctcttcgt gtacacagtt gtttctgaaa attttcaatg        360
agctttttct aacttctcaa gttctagaga aagaattaac caactgatga cttaaaaaaa        420
aaaaaaaaaa aaaaaaaa                                                       438


<210> 1060
<211> 442
<212> DNA
<213> Homo sapiens

<400> 1060
agccttcctc agcgtgcctc actgccactc ccagagccag ggagccccat aaaacccaca         60
tcatgtctta agagtatatc tggctccttg accagcaatc ggccctggga gccaccaggt        120
gggaaaagcg cctctgccag agtccaggcc ttgggatgac agacagcttg cccgcacact        180
cgggccccac tcaaggatgt agggcctttt ctggcccctg accctccct ggcatgggag          240
cgtggggacg gggctggcct tgggaggagc ggcaggggca tcacctcctt ctgctgcttc        300
tccctgctcc taccctcaag ggcctggggg ctgcccagct gcctctatgc ccttctgggg        360
gtctcagccc actgctgaca cttctgcaat ccagagaaac actaaataaa gcaatacgtg        420
tttgccaaaa aaaaaaaaa aa                                                   442


<210> 1061
<211> 542
<212> DNA
<213> Homo sapiens

<400> 1061
ggcacgagcc caagttgatt ttttttagtt ttgaaaatca aacaaagttc aaaaagtaaa         60
catcacaggt tgacatccca gcccaaagct gaggaaaaat gtctcttgtt acattttttg        120
gcacataata gaatttatga gcattttcag tgtttttgatt ttttccccca gtcactgtta       180
ttccttaccc tccagagtta ggtgtggaga gattatgttg gcctgtttcc atggtgacac        240
tgaagaaaag taattttta aaggaggttt ctactgtgtt atttcacatg catgaaacat         300
caacatctat gctgtgtggc tattacccct aaacataaag acacagaaat ggttggagta       360
ttttatataa atagacaagt agggtgatat tttccttggt ctcgtgccga ccctagtaac        420
aaaagtctct cagttaccca gggcacctgg gagagagtga gggaacagtt ctgttcagtg        480
ttaagcaagc tcctctcctg tgaataacct tttctttaaa aaaaaaaaa aaaaaaaaa         540
aa                                                                       542


<210> 1062
<211> 1060
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1060)
<223> n equals a,t,g, or c

<400> 1062
gcccacgcgt ccgcctcact gaagccaaaa gagggggagac tggagtgaaa gtgagggcaa        60
aagaggggag actggagtga aagtgaactc tgcttttgcc ctcactgaag ccaaaccaca        120
gaagactttg aggaatgaga gacaaatgag gtagagctca cctgtgctca ccagctccgt        180
caggtggtca gccgacccct ttccctggga accccacttc tctctgtggc tggcttggtt        240
gtcgggggtg agatgccata ttgattacag ggcagcaaag aaccagtacc aggaatttac        300
ttgaccattc cccttatttt tcatctagag gaatctcgga ttcagccctt tcattgctaa        360
gacaccttt cactgaggtt cttaccagct cagccaaatc tccactctgc tatagcagaa         420
gcaataatgt ttgctttaaa aagatttctt gacctatgcc ttttcttaga aagtttgata        480
gattagttag aacttcagat catcagatca gtctcaaatg ggtttcttgg aattttatat        540
ttgacaatat ttatactata ccaaactcat ttgcagttct taggtttgtt ggttaaaaca        600
ttttttaaa gcagtaagtt tatagaaaat gttttcattt aatggaaggc tggggaatgt        660
ccagcatcaa cccctatggc atgcattccc agtggccttc tcatctgggc ctggaacctt        720
tggttcaggg cttaggggag aacaggccac atggcaacag ccacacagtc attgccttca        780
acacagagcc acgtgtcccc aaacagcaat agtcatgccc ttgtccaggc tgggatctaa        840
```

622

```
ttgatacaat aggtcgttga ctccctccta gtagagctat ctaggtttgt ctggaaagtt     900
tccgaccctg gcttataggc accacacctc atgtactcct catggcttgg atctctgtat     960
tcagcctttg ttcagtccaa taaactttga gtagatgatc tcaaaaaaaa aaaaaaaaaa    1020
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaacn                          1060
```

<210> 1063
<211> 1240
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1039)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1052)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1063)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1076)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1175)
<223> n equals a,t,g, or c

<400> 1063
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ggcacgagct cagcaggtta atgagagtcg ctgtggggca ggcattgcaa ataatggtga      60
ttgcatggtg caccggcctt tctttagtag cagaagccct tctgtgtaag ggcaagagca     120
gggccactgt gacaggggag gcccagaggc ctcagcccca cactgggctc ctctgcaggt     180
tgcccctgga cctaagagtg ctacacctct ggaaaacagt gtggagagca gtgctgtggc     240
ctggagggag gaggacgcag ctagcaggca gttagtcggt tccctgggca tttccttttgc    300
ctccataggc ctccttgcct ccagtgatct gttagcaggt gttgggtgat ggtgccccct     360
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ataaacgtag agctsgtggg ctttgaagta ctcactcccc attgagggat tattttcttc     540
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gggaggaggc gtgttgtgca cacgtgtatg gggtgagagg cattataggt gtggcctggg     720
gatgccggcc tccctctctc cgtcaggaaa gccagcattg ttgccgcacc taggaggcag     780
caaggcgcgg tgacaggaat gtgtcaggac acaaactcag gcttcactgc cagctctgcc     840
atatgctcat ggttacctga agtgtataca ccaccgtgtg tttgttggct ggggctgcca     900
taacaaaata ccacagacga ggtggcttca actacagaaa cgttcttttc tcacagttat     960
ggaggctggg agcccaargt cactgtgaaa gcaggtttgg cttcccctgg ggccgctctc    1020
ccgggtttgt gctggccgnc tttttggtct gnccttacat ggnctattct ctgtgnggc    1080
gccttcctgc tgctcttcct cctcttataa ggaataccac acacacacac agacacatac    1140
acacacacat atgccacaca cacaccacac acacnacacc atacacatat gccacacaca    1200
cacaccaaca taccacatac acacatacac acacacacac                         1240
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<210> 1064
<211> 826
<212> DNA

623

<213> Homo sapiens

<400> 1064

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aaatgaaatg gcatgtgcta ttttctagtc attagcatca ttctctgtat tttcagacta      120
tttaatagtc aaatgtatat gattctccca tgtttttaa aaaaaaatct tagtattatg       180
tgaaatacaa aactagcatc tcctttagtt acagtatttt ttacttagtc taaaattatt      240
gtgattgtag tcattaatta atgtcctttg ctattatgaa aatgaagctg tttgctttag      300
tacttttacc catagaggaa atattttgtc atttataaag ccgtattgct actacatata      360
tctaaatgac tttttatttt ttaattgttc ttcattaatt ttagtgaatc ttagtatgtg      420
aatgtattac tggaatatga agcttaaat ggtttgttct atctcaggaa tattgtaaaa       480
aacatagttt tcatactacc tatgtatttc tgtgatgtgt cttgtaaagt atagtcaaat      540
aaattattaa taagattcat cattttagtt atttcttttt ctcatactct acactattga      600
catctatttt ctcccatacc gtcacaattt cacctttagc tagttcacca aagagcccaa      660
tattatattt tcatttgact ttaagaaata aaaagaggtc gggcatggtg gctcacagct      720
ctaatgccag cactttgaga ggccaaggca ggagggttgt ttgaggccag gagttcaaga      780
ctagcctggt caatgtagtg agacctcgtc tctaccaaaa aaaaaa                     826
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<210> 1065
<211> 1174
<212> DNA
<213> Homo sapiens

<400> 1065

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ggcacgagca catgtcaagg tgatgacgca cttccaaatg ggttagacgt tacctttgaa       60
gtaactgaat tgaggagatt aacgggcagt tataacacca tggttggaaa caatgaaggc      120
agtatggtac ttggcctcaa gcttcctaat cttcttggtc gtgcagaaaa ggtgaccttt      180
cagttttcct atggaacaaa agaaacttcg tatggcctgt ccttcttcaa accacggccc      240
ggaaacttcg aaagaaattt ctctgtaaac ttatataaag ttactggaca gttcccttgg      300
agctcactgc gggagacgga cagaggaatg tcagctgagt acagttttcc catatggaag      360
accagccaca ctgtcaagtg ggaaggcgta tggcgagaac tgggctgcct ctcaaggacg      420
gcgtcatttg ctgttcgaaa agaaagcgga cattcactga aatcatctct ttcgcacgcc      480
atggtcatcg attctcggaa ttcttccatc ttaccaagga gaggtgcttt gctgaaagtt      540
aaccaggaac tggcaggcta cactggcggg gatgtgagct tcatcaaaga agattttgaa      600
cttcagttga acaagcaact catatttgat tcagtttttt cagcgtcttt ctggggcgga      660
atgttggtac ccattggtga taagccgtca agcattgctg ataggtttta cctcgggga      720
cccacaagcg tccgcggatt cagcatgcac agcatcgggc cacagagcga aggagactac      780
ctaggtggag aagcgtactg ggccggcggc ctgcacctct acaccccatt acctttccgg      840
ccaggccagg gtggctttgg agaacttttc cgaacacact tctttctcaa cgcaggaaac      900
ctctgcaacc tcaactatgg ggagggcccc aaagctcata ttcgtaagct ggctgagtgc      960
atccgctggt cgtacggggc cgggattgtc ctcaggcttg gcaacatcgc tcggttggaa     1020
cttaattact gcgtccccat gggagtacag acaggcgaca ggatatgtga tggcgtccag     1080
tttggagctg ggataaggtt cctgtagccg acacccctac aggagaagct ctgggactgg     1140
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```

<210> 1066
<211> 1502
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (477)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (496)
<223> n equals a,t,g, or c

<220>

<221> SITE
<222> (513)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1279)
<223> n equals a,t,g, or c

<400> 1066
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cagacttagt atgccacaca cagacacaca cacaccggaa acaaagtttt atgtaaaaat     180
attttttgctt actgcttact ttaaaaagca gtttccttac gatatgatac gcactgtgat   240
attttccact ctattccttt attcagtgcc aggcatgacc tactccatag atttcatgac    300
ccactaatgg gctgcagtgt gaggtttgaa acctckgccc agaggcagat tctgcatgct    360
tatttagagg aatgtctgtc tagacgagag agattcatag aaaggagatc atttatggra   420
aaatmcagat attcatggac tttatcacca ggattctact ttgtttctcc tcctgcnttc    480
attacccagg cagranctgt atcttcaaat gcntcgtggg tctgcgtaca agccctacag    540
gtgccccaaa gccatgtgca gagytaagca ccccattttt ctcataactt gacccctctg    600
cctgragctc tactcccgct cctctggccc tcctctgtgc tgccctccca aatcgcccca    660
gctaaaaatg ttggcagtcc cttccatacc tgtctttctt attctgcaca tccgctcatc    720
tcaagggact attgattctg cctctaaaat tgctgccagc tctgtgtcat ctttttccatt   780
aatatagcta ttgccttcat catctctaac ctggagaaca ggaagagaat tcctcatact    840
ctccctggtc tagaaggtga cagaggggct gtttttgtgg ggtgttccga tccaacctga    900
tcatgtcctt tccccctccc caagccctca gcatggcccc tgcagtctcc tcctcagcac    960
ctctccagct atggttcttc tctccttgca cagtgcagcc atttattaac catgtcgtct   1020
actgaattca accaaacaga gctgtatatt ttctctgtat caggaaaatg aaaamgcctc   1080
caccatagaa tcttaaaatg tgtttcttta ggatcatctt agccactggt tctcaaccat   1140
cattacacat tagaaccacc tggggagcct taaaaatacc caaccccggc cgggcgcggt   1200
ggctcacgcc tgtaatccca gcactttggg aggccgaggc gggtggatca tgaggtcagg   1260
agatcgagac catcctggnt aacaaggtga aacccgtctc tactaaaaat acaaaaaatt   1320
agccgggcgc ggtggcgggc gcctgtagtc ccagctactc gggaggctga ggcaggagac   1380
tggcgtgaac ccgggaagcg gagcttgcag tgagccgaga ttgcgccact gcagtccgca   1440
gtccggcctg ggcgacagag cgagactccg tctcagaaaa aaaaaaaaaa aaaaaactcg   1500
ag                                                                  1502
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<210> 1067
<211> 814
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (480)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (504)
<223> n equals a,t,g, or c

<400> 1067
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tcagctgctg ttatgtacca aagggtatag gaacccttcc cagtcttcct gagctgctcc     120
tagtccttat ttagttcgtt ttttatacca atatagctct tcttcctcct tgtcctcttc     180
gtccatcacc acttcgtgtt tttaggctta ctgcaaatcc caactttctt gttcttgttt     240
tggtattgca agcttgccgg ctggctccat tggctcactc attatcctct ccatcacatt     300
cttttcttca cttactactg agtgatgcat atgtctgtgt ttgtctgtct ctcctaattt     360
agatttgatt aacctgtatc cccagtgccc tggcatatag tatttgttaa gtaaattaat     420
ggataaattc agaattgatc ccttttttgc cttctgtgct ttattctcca ttatgttatn     480
```

```
cccaccttgt gctattgaaa aaanggaact tcaggtcagg tgcagtaact catgcctgta      540
atcccagcac tttgggaggc tgaggtgact ggatcccttg agcccaggag tttgagatca      600
gcctgggcaa catggcgaaa ccccatctct acaaaaaata caaggattag ctgggcatgg      660
tggcatgtgt ctgcggtctc agctgaggca ggaggatttc tccagcccag gaggtcaagg      720
ctgcaataag ctatggttgc gccactgccc tccagcctgg gcaacagagc gagaccctat      780
ctcaaaagca aaaaaaaaaa aaaaaaact cgag                                   814
```

<210> 1068
<211> 1303
<212> DNA
<213> Homo sapiens

<400> 1068

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ggcacgagag ttccacctaa agatttctcc atacataatg aactctaact taccggcatg       60
taaacagacc tgacctactc ttgtgccaat ctctgagttt cagccaatca caggcagcca      120
actgtttaat ccctgttcaa ataaggtaaa tgccaagctg taaccaaccc agctgtttct      180
gtacctcact tccattttct gtacatcatt ttcctttta tgtccataaa tcttgtctat      240
gtggcagctc cagagaatct ctggacctat tttgattcag gggctgctca acttatgaat      300
cactgttcaa ttaaactcca tcgatttaat ttgtctaaag ttgttctttt aacaccagaa      360
taatgtatat cataatctcc ctcactctaa tcatgtggag attcagattt tttcagctaa      420
tgaggctcca accctgtctt tgtttaaaaa aaatgaaaaa acaaaacaaa accatgtcct      480
agttttactg ctaacagtat ttctctgact tttctggatt tcagtttgt acaatttcta      540
taataagagg ttaacagaca ttatatgcta gcctcacatg aatattacct cctgatacct      600
ataataatat gaataatata gagttatggg taaggaacag acaacttatt ttacattctt      660
gtcttttcct ctccttttcc ttttcaatct tgccagcaaa tcttgccatt taaaatttta      720
tatttaaaat gacgtatgca tttttctcca tagggaatat tagtggtcta taaactagtc      780
agtatttctt ccctacaata aagcaaaagc agtagaggtc ttttgctgta tcctatcaaa      840
ccagtaataa tccctctgcc aaaatcatca tctgttctga gtgtctactt tttcatttgt      900
ctgatagctc ctcttggcat atagtactct cttttgaacc ttctgccaaa caagcacaaa      960
ataggacagg aaataaaaac tctgaggcca aggtctccat ggcccacatc cccatctgtg     1020
agagcacaag agctattgct ctcctcacta aagattgcct gatctatttg ttggtctcca     1080
acaatttcct gagtgtatct gaatgaatgc aagttatttg gaatgagtgg ttgcttttta     1140
gtctcaatac tggctttata ctctacctct cgtctttcc tgttccatct cctatcatcc     1200
ttttttaaa gggagcatgt ggaagtgaaa ggacacggcg gagccagaac aagagtgact     1260
gagttttgtc tccactgctt acttgataag tgaccttgga caa                      1303
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<210> 1069
<211> 1522
<212> DNA
<213> Homo sapiens

<400> 1069
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ggcacgaggg catagtcttt aagggctgca gactaagttc atctttgtgc tcccgtgctg       60
cttccatttc aaaggcttcg ccagcgaatc ccgtgagtca ttcctggaac cttcaggagt      120
ctccatggtg atggggttga gtgggcctgg gggaagccag cattcactcc acttcctaac      180
aagttcctct tttctgattt tttttctttt tttttcaata gagactgggg ctgaggcttg      240
agctttttg ttttttttaaa caaatcacaa aataagaatc cctaagcctt ctttccccat      300
ttttttggaa acccattcta gataaatata taatctattc ttacttgcct ctgttgagac      360
catataaaac aacaaagcac aacaaaaact gtgcatttgc tttctttttt tttttttctt      420
ttcctgcaag tgttttcaga agggatctgg ttttcttgtt ttcctcagtg aaaagatgaa      480
aaggctctgg gtaactgatt gtagcctgaa gcagagatgc cggcagcatc aagcccagag      540
gaaggcaggc ctgtctagcc tactaccgcc cctgtggagg tctaccagga gcctgaaaat      600
tatgcccagt catggttggc agaactgtgc atattcttat aatccccacc tctccttcat      660
tctgaaatgc tctggaagar cgtagtatct ggggtttgtt agggaacgag cattaacgtt      720
accattttag gtacaggaaa atgtagctaa atctacaggc atctatggga ttttccacat      780
ggtaccaaaa attaaaattt gaaaccaatc taatgtgaat tgatgaacat aaataatctt      840
tgggggtata aattctgtgt caaattccat aatggtgttg tggccccaaa gttcccacac      900
ctgagggtga aaatgagttt tcagtaacat tgaaaacttg aattctgctg acttcgttat      960
cccctcaggt tgaagcagga cgtgcagctt cctgaggttc tgcccccaga tttctggggg     1020
tcttggggc attctcacca tgtgctccca ctctggagag tgcagccaat ctctgctggt     1080
agcttaaaat tgccaaagcc ttgcccgggg ctggggaagg aggtgggaa cagcttttct     1140
```

626

```
ctgctgtgtt agtcgctgtg tggggcccca cagcaaggct gcttgagcct tcattgacca    1200
gctatctagt ttttgcttcc agtctgctct atcctccctc agccccagcc ttgcccctcc    1260
aggagcacgc caggttaaag ccacatcttt gtatttggaa tcctactttg ctctgacaac    1320
tgaggctttt ctaacaggtc aagctcacca aatctcattc tgggttctta cagcgtggtt    1380
tcttaagctg tgaaaccttt tcaaaagatg ataaaagccc cagaaattct ctcagaaaag    1440
tgaacatata ggtaacattt cacagacaag ctcaggagtt tctgggcctt caggagagaa    1500
tccttcctca caggaatttt ct                                            1522
```

<210> 1070
<211> 1572
<212> DNA
<213> Homo sapiens

<400> 1070
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cagggcatgg agaaaggtga ccctgatccc aaacctgccc tcccaagtct ctggtgttgg    180
ggagggcccg tgtgtttgtg taactgtgtg tgcatgttgg tctttgtgtg catatctgtt    240
ttccaggtct atgtgagtcc ttgtgctcct gctcctcagc tctccacccc aggttgcctc    300
tctcctgtgg gcctctgtct tctgggaata aagcagggtt tcctacttca ggggatgtag    360
agagatgccc aggttgcaca ggatgggatg gggtgtggta gcaaaaggag ggagaggagt    420
cctttttgtg ccaaatccct aagtgccgtt cggggggccat gtgtgcagca tgactctccc    480
tgtctgtggc aggacccaag cgcttgctta agccccagtg ctccatgcca gcacttgaac    540
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catgtttcta gctccccagt cccttgtgaa gccttgaggc tggcagaagg gttaggagtt    780
gaactctaga ttcccttcct gtctttgcct tccttttacc cctttccctg caacctcctt    840
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gagaagggtt tccagagttg ctaggtttgg gatggaaggg gcaggcagtg cacttgcccc   1020
tcctcatgcc ccttctgaca ccagctccct gtggaggcct ggtttctggg taatgcctcc   1080
cttgggcatc ttcatgcatc aaccaaatgg gccatcaggt acttcattag tcatggcaga   1140
aggaggggaa aagacttgtt ttccagacag aaaatctact cccctgtccc cagccatatc   1200
cctggatagg aagggatagg aagagactac ttggtgccat ggggtagggg tgagggtata   1260
agtagatcag agtgggaaga cctcagcctt gggtggcttg tctctgcttc ttgccaggtg   1320
ggagggcctg tccacaccct ggatccccgt accacagtgc cagccatgcc cttcccctgg   1380
gctaccattg tccctttcct cacccagttg gtagaggagt caggaggtgg gaggccgtgg   1440
gctttggttt tataatgtaa ccactgtggg ggtgggggag gatggtgaac catgtatttc   1500
agtgaaatat ttaatatatt taaatatcaa taaaatcaaa ctctttgtaa aaaaaaaaa    1560
aaaaaaaaaa aa                                                      1572
```

<210> 1071
<211> 1631
<212> DNA
<213> Homo sapiens

<400> 1071
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gatccccgg gctgcaggtt cccctctatg tgtccctgtg ttgtcatcat ttggctccca     60
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atggcctcca gctccatcca cgtccctaca aaggacatga tctcgttatt tcttgtggct    180
gctactgaca tagcatctat cttgaaattc atttcattca tgcaaagttg tccagcgctt    240
acacagaaca cagagagcag agttgggcca aaggacctta gcttttatca tgtctccctt    300
ttttttgact gtgctaaagc attattttgc ttttctgttt gttaccaaat cctttatctt    360
caatggttaa ttttttgttt atatatttgg ttaaacagga aaactgtggt atgtctgtgt    420
gtaatggtaa aatatatatc ctgggcggaa gacgggaaaa tggagaagcc acagacacta    480
ttctctgtta tgatcctgca acaagtatca tcacaggggt agctgcaatg cccaggccag    540
tgtcctatca tggctgtgtg actattcata gatacaatga gaaatgcttt aaactctgaa    600
gacaggatac ctcaccgaag aagccacact gatccaagat gggaggtttt aaaaactcta    660
cagtgggaac ttcacatatc tcctttgtgc catatgcaaa aaatagtaaa aataataatt    720
tggtgccttt ctcctcaaaa tatcaatctt tcaaactata ataaagcctt tcctataatt    780
```

627

```
gaaaaaaaaa actttttgt taaaggtaat ggtggttgtt acttggcctt tgaagagtgt    840
acctttgtaa gtatttgtaa gaagtctatg tgaattagga aatgtctgtc tgcatacctt    900
ttaggagcgt gtgaatggtg tcttcactta ttatgtatgt ttatctgtat gtatattcct    960
tattttgtca tatatgtaga gaaaattgca tgacttgagg catcatttag gttgaagaag   1020
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aagtatatcc agattggtta attttattga agggtttttt tctgtaattg ataaaaatgt   1140
aatgacaaca attcaggcat cataaaatac tgaactattg tgactttatt cttagaattg   1200
ctgtcttaca ttaaacatgt ttttaggggg aagttaggta ggagatagaa aaataagtgc   1260
ccctacaagg gggattaaaa ttacaagtta attcctaaga gaaaaatgga atggcctttg   1320
aaggaaaaat gacccactat ggctctcaaa gtttttatgc atcatctctt caatcctcta   1380
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tgaaaaacag ggacagacag ccaggtacag agactcacac ctgtactccc aactactcag   1500
caggctgggg caggaggatt gcttgagccc aggagtctga ggctacagtg agctatgaac   1560
gcacacggca ccctagcctg ggcaacaggt tgcgacactg tctcaagaaa aaaaaaaaa   1620
aaaaactcga g                                                        1631
```

<210> 1072
<211> 1902
<212> DNA
<213> Homo sapiens

<400> 1072

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ggcacgagat cggcatgagt gtaacagtga taacctgatc tgtttgtttt aaagattatt     60
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gtctgatgct gtgaaagcaa tctagtgcta tatttctacc tcctcatttg tcttaattat    180
ttggtaagtg ggattatgat gagtaactgg aggggcttag aaacaaaaac tggatgaaag    240
agtatgcatg aagaaaagct tctttgataa atgtggagtt cttcattata aatatatatt    300
catgaattca cagataagta cttaaagaac agacagttta cttggcctaa aaatattttg    360
atgtttactc aaaaagtacc tcttcaggtc ttgagaacat ggaaagaat tgagtgcttt    420
taaatacttt ttagaaagta atcataaaag taaattgaat ttcaaaccta tttggcttct    480
gttttgtgaa cctttgaact atatgtatgt gtataagggt atacacatac atatatggca    540
tataacaagt gtacacatat acacataaca agtgtagaag tatatattac atacatacac    600
tcactctgtc tggtataggc taattttgaa gaactcccat aagtttctgc tgcttctccc    660
ataactgctg ccaccaccat cagaatcata atcaaaccta acctttttgt ttggggcacc    720
aaatctgaag acaaaattaa tttgcaccag taaacttcaa gctgctttct ttcttgaaaa    780
ctaaacgttt aacgtataat gtctgtttgg atactgttcc aaattgttga ttgcatgtgg    840
ttaatgttgc attagagcac tttgcaattg cataattcat taatgttttg tgagcttgca    900
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tagatgtcga tgactgcaag taataataca gtttataatg aaactatcta caattcttgt   1020
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gcacttctgt cagtctttga aaaaagaacg tattttttgt gctttgaaga tctctgaaga   1200
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taagaatgac ctgtcactat aatatactgt atgtttacat tttatttaaa tttaatctct   1380
tatgtatagg gtgataacct tccccagaaa caacagtgat tgcgattgtt ttctagaaac   1440
ttctttaaag tgccacattt ggcagtacaa atgagtctga gtgtaatagc ccagagattt   1500
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tgttttcat agtaattcaa atgaacttcc tattttttgat agtaaatgtc atttaatagt   1620
atacttgcca tttgagcctc actgcaaaat tagtgcagag gagaaacaa ttttttaatgt   1680
aatcttgatt ttacctcata tactgtacat tccaaaaact ctaaacttttt taaagattat   1740
agatacacta ccaaacatat caccttaaaa ttgtataagg ctgaatgaac ttcatacaaa   1800
tgaaaaaaat ctcataaaaa tacataaact atgtagcaaa agtatctgta aaatccatgg   1860
aaaataaaag ttgtatcatt cttttttgaaa aaaaaaaaa aa                       1902
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<210> 1073
<211> 2054
<212> DNA
<213> Homo sapiens

<220>

628

<221> SITE
<222> (428)
<223> n equals a,t,g, or c

<400> 1073
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gtaatgaata gtgatcagca cccaagattt tcaaaattat gtcaaacaca gtgtccaagc     120
agtaatatgg gatttaaaaa aatacattta tgggggatga aatgagcata aggacttggt     180
catccacaca taactactcc actgagtaag aagttccgtc tctcccacgg ctggtttgtc     240
cccacttccg gacctgtctt ctttctctgt tgcagttggc aaggtggaag gtttaaggag     300
gaaagactta cacaatattg ttgtcatgca acagagcccg tgcatgtaaa tgtattatgt     360
gcagaaaaca aacccgcttg tgattgcgat ggggactgtt tccataaact ttttttttt      420
ttacaagnaa aggaaagtct attgaatttt aaagagccag aaaactgccg gatgtgctga     480
cagctagagg tgtcttgggt acaaaacacg ccaaatgagc cttccctgca ttcactctaa     540
tatccttcat ccaaaagcag gtctttcttc ttaaagttca gttttcatta tgacatagag     600
atgcatcttg gtaacaaaca gttagcgtac gtaatcttat taatcttact gtgtccgtca     660
gttgcatttt taaaatagtg gtaggcgtat ctgcaaacgt acacccaacg tctctgagaa     720
ggatatgggc tcatccagtc ttcatcacga gatccacata catctcttca tctgagtact     780
atcacacaga aaagactgac ggcttgtgac aattgtacaa cattgctctt tacccgtaca     840
tagctaagca atgttgatat ccatgttagt aaggactcaa cattcatttt caggtgtcgt     900
ttcacttttg attcattttc tctctgtgtt tatttattta tttatttara rtcytgrtct     960
gttcattcat tcactttta aaactaaatt ataagaaaaa agtgtatata tcggaaatga    1020
gaaatataar ataaatatca ttactactga gaaattgtac tgkaattgag ragggagaag    1080
tkgttkgttt ccctttgatc tyccccagsa cttagcaaaa agcctttac agaaaaakga    1140
agataaacat taataaacag gttgatcagt taaatggttt aatgaaacaa attagtacat    1200
ctatggaact ctttttccat ccgtgtttgc taaatcagag gaatgactaa ttacagagtg    1260
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caagggtaat agatactgtg taaactgggt taaaaaatcc gtacagtgcc agggatgtaa    1500
taaagatggt cttttcattct gtgaaaatat aatgaacttc ctcaaggcaa attacataat    1560
atcatagaac tcaatgtttc tgctactatc gggtaaggtg accatacaca gtcgggagsc    1620
tgtggctgca tgcgaggtgt atgcttcgtt cctcagggtt attgctgctt ccctcatctc    1680
agctgagcag aaatattacc tagctaaaaa agacactctg ggctcaaaca gatgtgaaaa    1740
acacagcaaa actaggacgt gatgctcatc tttcttttct ttcctttctc ctttggagtg    1800
acacataaac caagcagtca acattttttt tttttggtg tgtttattca agtaagcaaa    1860
gccttttcg tatgagaaat gagaaatgag aaatgtgcct gcttctcatg actgatagaa    1920
acaattccgc atgtagtcat aagagccca gttcaaggac gtgcctattt tagtacaggc    1980
ctttgcagaa cgagagataa atgacccact cagaacaaga actcaggacc aaaaaaaaaa    2040
aaaaaaaact cgag                                                     2054
```

<210> 1074
<211> 1003
<212> DNA
<213> Homo sapiens

<400> 1074
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cttgtactcc cagctactca ggaagcttaa ggtgagaaga ttgcttgagc ccaggagttt     120
tgagaccaac ctgggcaaca cagcaagacc ccagctcaaa caaagaaaaa aagttattga     180
atttttatt tctatggatc atttttgta gtttcttatt cctttcaccc ttcattccca     240
cttttgatcc catcttttat ttatttagtt ttattaaatg tatatttgtc tgataattct     300
gctatctaca gttttttgtg gacctgactc agcatttctt tgtttcttcg gattcagact     360
gttggtggct tgtgatttta gtgatttttg gccgtgaaca tgtttcttgg acttttgtct     420
gtgggaattc tctgtgtact ctgtataaat taagttactt caggtgtttt gcattttctt     480
ttgccatgca cctgggggcct gggtcactac ccttctggta ccacttaaaa ctgaattttt     540
gtcttgggtg ctcgtactga tcctgtatga gtacaggttt atacttactg tagaaatatg     600
gtgtttgatt atggggtatt gtcccagatg gtgctggagt attaatatgc tctctgttaa     660
acttaatgtg ttgtccctgt aaaactccaa aattctgaat tccagaatac tactggcccc     720
aaatgtttaa gataagggca ctgcctgtat ttgtttctgc ctcccactat tttccttagt     780
ttaacacaaa ctcacctttt taaaaaacat tttgagagaa ttcagtattg ggaagagttt     840
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629
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ctaacctgtt tctggaaatg gaagtccaaa gtctgtttct gtaattgttt tttttttgag      900
atggagtctc actctgtcac ccaggctgga gtgcaatgac gtactctcag ctcactgaac      960
ccgggaggca gaggactgca tctcaaaaaa aaaaaaaaaa aaa                        1003

<210> 1075
<211> 1832
<212> DNA
<213> Homo sapiens

<400> 1075
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tcttgtcagc tacattgttt tcttagatgg atttctcctg ttaatcctca aatatctgaa      120
cttctgtgtt acccaagtgt cttatacaag cttctggtgt ctaggacaaa tttatggcaa      180
ataaaattag caaaactgaa ctgggttgaa ctgaacaaga ggatggggga attgtgcaaa      240
tacgttgtta gtagaaggtc aatttaaaat agggactaga aattatttga agttttcttt      300
attacggatt caaagactta ttttgaaagt tggaaggaga agggagggaa gagagcagag      360
ggagaggtgt agtcaagctc ttgaatataa ctggtggtat tgtgggcaga gatctttagt      420
tcaaatccac gtattttta aaagagagaa ccggaggtag agcaatgatc agatgggtgc       480
acagaccagt gccaatctga acattgttaa tggcctgtga catgatgagc acaggaacag      540
gcatgaaaga tattgccata caattttaat ttatacaagt attggcccct caagtggttg      600
gaaattttt ttttaatctc tttttctgaa cagggtctta ctctgtcgcc caggctggag       660
tgcagtgatg caatcacggc tcactgcagc ctcgacctcc ccagctcaag caatcctccc      720
acctcagcct cctaagtacc tggtactaca ggcgcgtgcc accacacctg ctaattttt       780
gcatctttg taaaacaggg ttttgccacg ttgcttaggc tggtcttgaa ctcctgaact        840
caagtgatcc gcccacctca gcctcccaaa gtgttgggat tacagacatt agccatcacg      900
cctgccctag aaacagtttt ttaataggag atatttgaga ggcattgagg taggagactc      960
tatgacatgc cctcagaata tcagaatctt cttagaaata aactaggaaa tgcagatgtt     1020
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tatcagtaag aaacagacct agtttaaaag gaataatcaa caattttata aaggagatgg     1140
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ctctctctct taatttagac tttcaaccta tgaaaatgta aatacctttg aaaaaactaa     1260
actatcagtc atttacatcc tctcatgaat gaaatgcagt gtagggagag gagatggcag     1320
gacacagcaa acaggacaca tttgcctgct tctctcttgc ctaattcttc ctgacctgta     1380
tttactgatg cttaataata cttgtaagac tctaggggtt catttcccat ttcagcggaa     1440
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gaatttaagt ccatagaatg aaggtagtta ttcctgcctg tgttgcccac ctgttcacaa     1560
aaagtacctt tatgcttgaa aacattaggt tctttggtta ctgcactgta gtttcaaatg     1620
gatcctccag atggcattca tgtcttactc agaaagggca ctgccattgt ccccaaggct     1680
tctgtctact aattctattg gtcttgtgtt ttgcttgctt ggcaaaaaaa aaaaaaaaa      1740
aaaaaaaaaa tggagctatt ttctgtctat ataaatctac ttatatgaat aaccattaaa     1800
gtgattttgt ataaaaaaaa aaaaaaaaaa aa                                   1832

<210> 1076
<211> 2352
<212> DNA
<213> Homo sapiens

<400> 1076
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atacaggact cagactctta ctgagttggc caggagcagc aggcaccaca gcctgtgtgt      120
gtgcagatac agtgtactac taccaaatgg tgcccagctg gaagtttagg tctcctccta      180
cctggatctc attacttggg ccgtttcag gatcgtttaa tgtggataat gattctggaa        240
tgtggctata cttactgctc tattaacatt aaggggttag aattgcagga aacatcctgt       300
catactgcag aagctcgcag attgatgaag ttttgaaga tgcttttgag caagaataca        360
caagagtatg ttcccttaat gaacactttg gaaatgtctt gacaccctgt actgttttgc      420
ctgtgaaatt gtattctgat gccaggaatg ttctatcagg cataattgat tctcatgaaa      480
acttaaaaga atttaaaggt gacctcatta agtacttgt gtggatactt gttcaatact        540
gctccaaaag gcctggcatg aaagagaatg ttcacaacac tgaaataaa gggaaagcac        600
ctctaatgtt gcctgctttg aacactttgc cacctcccaa atccccagaa gacatagaca      660
gtttaaattc agaaactttt aatgactggt ctgatgataa tattttgat gatgagccaa        720
ctatcaaaaa agtaatagaa gaaaacatc agttgaaaga tttgccaggt acaaatttgt         780
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ttattccagg atcagtagaa tcacagaggg ttggtgatca ttctacaggc actgttcctg    840
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aggacatgcc atatattcct ctcatggagt tcagttgttc acattctcac ttagtatgct    960
tacccgcaga gtggaggact agctgtatgc ccagttccaa aatgaaggag atgagctcgt   1020
tatttccaga agactggtac caatttgttc taaggcagtt ggaatgttat cattcagaag   1080
agaaggcctc aaatgtactg gaagaaattg ccaaggacaa agttttaaaa gactttatg    1140
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ctggtcatat attgagagtt tacggtggtg ttttgccttg gtctgttgct ttggactggc   1260
tcacagaaaa gccagaactg tttcaactag cactgaaagc attcaggtat actctgaaac   1320
taatgattga taaagcaagt ttaggtccaa tagaagactt tagagaactg attaagtacc   1380
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acactgggag agtgcttagc cttcaagaat tattgatcca agtgggaaag ttaaatcctg   1560
aagctgttag aggtcagtgg gccaatcttt catgggaatt actttatgcc acaaacgatg   1620
atgaagaacg ttatagtata caagctcatc cactactttt aagaaatctt acggtacaag   1680
cagcagaacc tcccctggga tatccgattt attcttcaaa acctctccac atacatttgt   1740
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aaaagtaact gtgattcttg taacttgagg acttctccac acccccattc agatgcctga   1860
gaacagctaa gctccgtaaa gttggttctc ttagccatct taatggttct aaaaaacagc   1920
aaaaacatct ttatgtctaa gataaaagaa ctatttggcc aatatttgtg ccctctggac   1980
tttagtaggc tttggtaaat gtgagaaaac ttttgtagaa ttatcatata atgaattttg   2040
taatgctttc ttaaatgtgt tataggtgaa ttgccataca aagttaacag ctatgtaatt   2100
tttacatact taagagataa acatatccag tgttctaagt agtgataatg gatcctgttg   2160
aaggttaaca taatgtgtat atatttgttt gaaatataat ttatagtatt ttcaaatgtg   2220
ctgatttatt ttgacatcta atatctgaat gtttttgtat caagtagttt gttttcatag   2280
acttcaattc ataaactta aaaaactttt aataaaatat tttccttcct tttcaaaaaa    2340
aaaaaaaaaa aa                                                        2352

<210> 1077
<211> 1050
<212> DNA
<213> Homo sapiens

<400> 1077
ggcacgagtt tacaggcagg gatataagca taaattttca tgtcaattct aaagtcaatg     60
ggatgagttc ctaactagag tcagaaaact ctgttaaata ataacacttc tttgcatttg    120
gaggatgctt attttccaaa tcatttcaca gcaattgcct tatttgcttc ttgcaataac    180
cacaggaagt caggagagca gatattttta ttcctgttgg acaaatgaaa aaaaatgaag    240
catggaagag ttaattgaat cacctaagat tccacacacg taagkggmca gagttctaga    300
ttagaaactc tcttctgatt ctcctatgct aggtgtaaaa gagtagtcaa gagtggttat    360
aggtacagct taagacagac ctgtactgaa atccacttga gtccggctac aacttgtcca    420
ggtggatctt gagtattttt agtagagacg ggggggttcc tcacgttggc cgggctggtc    480
ttgaactcct agcctcaggt gatcctccct cctcagtctc ccaaagtatt gagattacag    540
gcatgaggca ccacatgtgg ccaatagctg tactttccaa aaatgtccaa gtcaagaaag    600
acaaagtaag gctggagaac tgttccagat tagactaaaa acacatgatc ctgaattgaa    660
aaaatatgat cctgaattga aaattatctt gagaactgaa atgggttaaa tgaatactat    720
ttagacaatt gccaaaattt gattatggac tatattcgtt tcctacggct gctatggtga    780
attaccacaa atttggtggc ttaaaataac acacatttat tttcttatcg ctctgaaggt    840
caggaggatg aagccagttt cactgggctg aaatcaagat gttaacaggg ttgaactccc    900
tgtggactgg taaagcacac attatctcca gttactctt ttttttttga tacggagttt    960
cgctcttgtt gcctaggctg gagtgagctg agatcgctcc accgcactcc agtctgggtg   1020
actctgcctc aaaaaaaaaa aaaaaaaaaa                                    1050

<210> 1078
<211> 746
<212> DNA
<213> Homo sapiens

<400> 1078
gggaatgctg accaaaactt gatttcatca gcttcatgaa aaggactagt gtcattaacc     60
tgttgaacag aattggttta ttaaaaaaat catttccagt agtgtgaaac ctttacgagt    120
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631

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ctttaacatc taaatgttat gactccttgt accttaagtt ttccagtctt tcttatttat       180
atcatctcca agtacctctg gctcctttcc tcttgctcac cggaacctta gttttcctca       240
acagaatgct ttgttaaagt agcccacagg tgcaggatcc atagcaccgt cgtgcagact       300
agcagcccaa aggtgtgttt ggtttggctt atacggtgtt ttgctttta aactacttgc        360
cataatttaa aagtggcaac actagactta aaaaaaaaaa agtctgattg cccatattag       420
atttttttt taattcttca caaaatctgc tcttcctgaa agatcaaagt gtctagaaag        480
cccaaacatg tattcttaac atagtaggca ccagctgaaa catgttcagg gcttctagaa       540
cactaaaaaa tttggcttaa accagtgttc agtctggtgc caaacttcga atggaataca       600
aattcacata atctgaactt tgttcacagg ttatcctaat agagtaattc ttcactttgc       660
tctattgaac tgtcttaagg atttgtttaa acagctaagt tacttgatta aaataatgat       720
aaaattgtaa aaaaaaaaa aaaaaa                                             746
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<210> 1079
<211> 2608
<212> DNA
<213> Homo sapiens

<400> 1079

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gaaattggaa ataaaccaac attgtttaca ttccaggaga cttgtagctc agccacacac      120
gcagtaatga cctgtgcccg ttcgcctctg gcactgccca cccctctttt ttttttctt       180
ctaattctgt actcacaaaa gagaatctca ttttcttctt tcttccattc ccttaaattc      240
tgagtactgt acatatattt ctgggttccc acgatgatgt gaaaaactac cagactgttt      300
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tttctcacgc ataaaatgga gagtggatta atcgccaaag attcttctga tctgacattt      540
tgaaattgtg agagaaacta gatgactgta aacttggtca caggcctggt tctggcagtt      600
ctttgcggac tttttctag cattatgcca aataaacatg cagtctcagt gtgctctcgc       660
atgtatgaat atctagtcct ttctgtggtt ctcagccaag acataaaaac taggactcag      720
agcacataca aaaccagtta tgtttcggaa agagggaaaa gagtccccga gcccggatct      780
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aggcagtatc cttaatattc attctaaatg agttaacgac ttaacttgaa attgggccta      960
aggagtgaga actacaaaaa tacaaaatgc ttgtccagga ctcagccatg cacaccttga     1020
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accagtgtct gatgaagggc agagtgaccc agactgcagg cagtaactga cttcacacag     1140
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caccgagatc tgcattccga ctgcctatga acgggtgtgg gggccggggg ctggcttgct     1260
gaagtcttca acttgcactc ggagctcctt tgatacctca gagctggctg tcaggtggca     1320
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tctgtgaagg cttttttttt cctttggcct gggaattttt cccattttta tgaaggggtt     1440
ttaaattgtt tcattttgtg tgctgtgctt caaagcctta actgtcaaat cttgcattat     1500
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ttttacttgt cacacctgtc ttaataaact ggagttttgc tgctaaagaa ctcttctctc     1620
tgggggcaga gcttctattt atggcacata gacatcagct aggctttggg gaatcgtttg     1680
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cagcatcctg gcgactccac agtggagctg agcgccactc cctgtagccg atctgggact     1860
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tggacacagc ggggctgcag ctaacggggt acaggtagga gctaactaac ttcacccctg     1980
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tccaggcgag aaacctgtgg tctagaacca cagcaagaag aggaggcatg ctggcctgca     2160
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gaggtatgag gattgcttga gcctgggagt ttgaggctgc agtgagctat gattgcacca     2520
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632

<210> 1080
<211> 1067
<212> DNA
<213> Homo sapiens

<400> 1080
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ggcacgagaa ataaataaat aaaataataa taatgataat atgatagcag ctattatttt      60
atcgagggct ctgccaagtg ctttatatgc gctaggctct ataatcttca caacaacctt     120
taagaaagac tctgttacca tcttcaattt acagatgcag aaacgaagca caaagatgtc     180
atcaaagtgt ctgaaggtca cagggccagt aaggccatgg gaaatgtgca tgttaatctg     240
ggctctttcc attctgctca ttgcttctca ccttcccttc ctttctaggt accaggggga     300
acagagtagg tagagactgg tctcaggctg cctgaaggct gacacagacc cagccctgac     360
cctctcacaa cgtcacactg catttgcccc cagctcctct cagtctagaa acctgcaaac     420
cccaggatcc tagtgtctaa gcacaggccc cagtgtctgt taggtcaccc cattccaggc     480
ttggatctag ccccaccccc tccctcacat ctcccacctc ctcagtcaaa agcaaagtca     540
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tagctgaatg tggtggcatg cacctgtagt cccagctact tgagaggctg aggtgggagg     960
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<210> 1081
<211> 2466
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
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<223> n equals a,t,g, or c

<220>
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<222> (1449)
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<223> n equals a,t,g, or c

<400> 1081
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gggtctctag ttttttcatcc tgcaatatct gtttccacac tgccggttgc ctggcaacac     360
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attcttcaaa ttctccattt tattcagtat taaataactt tcaaaatatg gctatcttga     2400
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<210> 1082
<211> 2549
<212> DNA
<213> Homo sapiens

<400> 1082
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tcttgcagcg attccggttg cacatccaca ggggcttcta aagaatgcac tcaggacttc      180
tggcctcatt cccaccccat ggaccttacc tcaccctttt ctccagcacc attgggccaa      240
aatgagacct tatcaaagaa agaacaggac gcttgccttt ttcctcaggt tcttaattat      300
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tacataaata ctcagagctc tttttttttt taaacatcca ggatctcaag ggtgttcaga      420
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aagtggcccc tgtgtgggga tgcttcaagc caggtggaag gacggctgga ctgtgatagg      540
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634

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ctgcaggagc tcttcagaaa ggcacatgag gaccacggtt tgctcagttt ctggtaaaac    1560
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aatatcaatt aaaatgtttt atttatttta ttaaaagctc aatattttct atgaattcaa    1860
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aaaaaaaaaa aaaaaaaaaa aaaaaaaa                                       2549
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<210> 1083
<211> 1068
<212> DNA
<213> Homo sapiens

<400> 1083
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caagcttcta gtaaaggtct ctgtttctgc actctcccct ccacatttct atacgacttt    180
taaaatgtag tttttttcaa atcattttcc cccatgatat tttctctagt atctctacgs    240
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tcaggaagac ggggcagagt tctcagcaca ggccaagaac taaaggcaga aagagtgtag    660
ccttggggac gtggaagcct agagcatttg gaagacgcaa acaagggaga ggggagcagc    720
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gtaaagggga aagtagtgaa tgccttaggc ttcatgggcc gtaaggtctc tgccacagga    840
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tgtgttccaa taaaacggta tttatggata ctaaaattga atttcatata atgtaaatat    960
catgaaatag taaacatttg aatttttttt ttctcttaac cattcttacc tcatgggcca    1020
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<210> 1084
<211> 1546
<212> DNA
<213> Homo sapiens

<400> 1084
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tgactgcccc ttaagaggtc ctctctctcc tcctgtcctc tcattttag tttccctcaa     180
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tgcagctgaa tccaagtcta tacagctagt cctaaattgc acctgatttc caactgtcta    300
ttaaggcttc ctctcttaag tgggaaggtc atatcctatg gctcccaacc ccatatattc    360
aaattaaatg cacaatcttt ctgctcctca tgctccacaa accacttccc tttctaagtg    420
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caatgtcctc caaaatgtca cttggattca cctttcctcc tcctttttcct cacttcattc   600
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635

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tcagacccat ttttctaaaa tcgtttttcat caaatcaatc tctctgcaca actcaagaag      720
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catggcttta aataccatcc agtggtgacg cctccaaaat gtttatctta tcttctgagt     1260
tccttaccca gctgcctact agacatctcc tgagtgtact atttaacata tctgaacctg     1320
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cagtgtcttg ccacaaatca atccattagc aagttctgtc aagagtctac ctccagacac     1500
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<210> 1085
<211> 1392
<212> DNA
<213> Homo sapiens

<400> 1085
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gatggtggtg atggaagcag gtggaattat gccctgttgg ttccaatgct gggattggct      180
gcttttcgtt ggatttggtc tagggagtcc cagaaagaag tagaaaaaga gagagaagcc      240
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<210> 1086
<211> 1250
<212> DNA
<213> Homo sapiens

<400> 1086
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636

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<210> 1087
<211> 2107
<212> DNA
<213> Homo sapiens

<400> 1087
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aaaaaaa                                                              2107

<210> 1088
<211> 1174
<212> DNA
<213> Homo sapiens
```

637

<400> 1088

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aaacatgagg tggttattgc ttgtgtttaa tcagatacgc tttactgtca taagcctaat    120
ttgcatttat tatctcttcg ctattatttt gtacaggatc tttttggattc atgttcttgc    180
gtgattgatt tctcaggaac tttctgagtt tggttttggt gtgccagctc cacagaatga    240
gctagggaga gctttctctg tttctatacc tgaatgcttg gtgtaatatt ttaaattagg    300
tatatgattg attttgagta taaaaccagc cttgtatgtc agggataaat cccatgatgt    360
atactctttt tgttgtgttg ttgaatttgg tttgctaata ttttattgag gagttttgca    420
tcaattttca ttagagaagt gggcctttag tttttgttt gtttctgttt tgtttgtttt    480
tgtatttgtt ttttggaact gaatgaagtg cactgtgttc tctcaaagga gatttgcgtt    540
gctttctagg ggtttgggtg cacaaatcca cagcttccgg ccttttaagc cacttgtcaa    600
ggtcactctg actgcagggc cagcagcctg ggaccagtac agaccatcac ggcacaggct    660
tcctgggcta gtcggagaag gtgaagctcg catagtggcc agggacttgg cctttctgcc    720
ctcacctccc tgaggccaca caaatcctca gcctgtgtgg ctggaggtgc cgccatccac    780
agctcacctc agtttcaata tcttgtcctc attttctttt ccctttttac aaaatgaagc    840
acatatttct tctggctttt gtggcgtttc tctgtgggag aggccatctg aatacctaac    900
cagtgtgtta cccagataat gaaagttagc attcactttt taaatagcag taccctcaaa    960
aaaaattgaa aaagtcctat gtagtaatga tgctaatgaa gaattgaaag tgtttattag   1020
gtaaataata tggtcttgca cattgtttat gtggtaaaga ctgatttttg tagtcttgta   1080
aaagacattt tctgttcatt tacttttttc attataagat atgtataaaa taaaacttgc   1140
cattttaacc attaaaaaaa aaaaaaaaaa aaaa                                1174
```

<210> 1089
<211> 2029
<212> DNA
<213> Homo sapiens

<400> 1089

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gaattcctcc catggagaca gaatggcttt cttcaaagtc agttaccatt ttctgattgc     60
tctgctcact tacaattgga cacagccaac tctaagtgcc tctgtcaata gctaaaactt    120
cctgtcacct gagacaacag acatggtcat ccagacagca acataaagtt cctccacagc    180
tcttgatgct gagaaacaga gagccatgct gacttccttc ttcttttcct atattgctct    240
ctttcttgcc ttagggtttt aaattatctt agaaatcacc acttactgct tacatagatc    300
agtacctttc aaacatccag ccctccaaag gaaaggcttt tgatagctaa agattaatga    360
ctgtatattc cagattttca ccctaatagg tgctcaataa aaattactta aacttcatca    420
agggtttatc ttgtgttatt ctttaatggc aagtgcattg catgtactgg tgaaaatgtt    480
taaaatattt tttcaaaagg aatcagtatt caattttaca ttaggttgga tggcagtcac    540
attacaatat gacaatatta attctaactc ttctatgcta gacaaagaca aggtttcatt    600
ttcttactta atgcactgac attttggtca atgcccattt taagtgatga caagaatgct    660
tcttaaatgg tatactgctt gcttactatt ggctcaaata taaactcaat cttctttagg    720
atgaccactt aactacaata tcatcaaaac actgcaagta aataaatgta cgttcctcat    780
cacaactcct gaaggaaatt tcttactgat catccttaac gtaaggattc aaagatacaa    840
agaaaactta agaaattgaa agttctatcc taaaactatc acctgtaagg ctggttaaa    900
tatatatata tgttaattat agagcactgc cacataccac aataaactta agtagaatac    960
aattatctta ggacagtgcc tacttgggga atcttttagt ttaatctaac aaacacttat   1020
tgagcacaca ttaaatacca ggtacactgt tactcattgg aaatatgaaa gatacggtct   1080
ttcccccact gagaaactca gaccaatata aatggctgtt gtcttgggaa cgtaacacca   1140
gatgacatgc tttgaatatg aatgtaagga aaacaaatct acttttttct tataaaaaaa   1200
agtcccattt taaatttcct ataactgcta tataacaaca aaaaaagaaa aagccatcat   1260
aggtatggca ctctcctatg twcctcagaa aaatcacgtc caccctacgc tttgccttca   1320
gaatcaggac tgaagcatca ccattcagtc agagcttaaa ctaattgcaa ttaaagttgt   1380
tttaaggaga aaaaaaaag cctaagttaa atgaccaaac ccaaatttag aaagataatg   1440
acagcaaaca tcacatgaag ctaattctca tttttcatta ccatacaatt aaagttacaa   1500
tttattcctc cctaagagtc aaaaaaagag ttccctgcat gtactgctct agcatattct   1560
acatgtagaa tcttttttct acaaattata tatttctctt cttacaatat tatatatttc   1620
aagaacttaa aaagaagatg tcagcttcat attaaagacc agtcttgaat accagacaaa   1680
attatccttc tcttttcccc tcatttttct ctttctaacc ataggggcat tccatagttc   1740
ctttgcctct agcacacaac taagaaattc tgaaagaata ttgaactcaa ctaaaccaat   1800
ttaataaaca cataaaagat atttaataaa tatgtaaagg tagtacactt tttatctgct   1860
atttaaaatt ttgttttggt ttggggagag gggtcaaaga ggaaggaaga taaactgaaa   1920
```

```
gtgttataga gaggagggaa atttgaagac accatattag aaacatgatc ctatcagaat    1980
gacacagcgg aattcgatat caagcttatc gataccrtcg acctcgaag                2029
```

<210> 1090
<211> 1035
<212> DNA
<213> Homo sapiens

<400> 1090
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aattcggcac gagctatatt cttcttgatt tctagccttt tattggctct cagattgcca     60
gagttgggac tcaatagtaa gtaaccattt tkttgaggtg gtagtgattc taccagggtg    120
agtwatcatg acagcagaat cactgcgttt ttytctctac tctgtggcat agactctatg    180
ccatagagtg acgtgtgaaa ggcttgaggc tccctaccta cgagacaccc tggtccattc    240
tagcagtatg gcacgtgctg actgggtttt gagtctcttg ctgtataatc acattactgc    300
acttccctgc attttctcat ccaaaaatgg ggattacctg ctttgtggat cggtttgcag    360
atgaaataac acacgcaggg tatctagcac ggtcccccac atggcacatt cagtgttagc    420
cacacttcca tactaactgc cctgcgggga tatttaatga gctcttaaat ggcagaaatg    480
ttgtgtcttt tcctgttccc ttagtattcc tattttttgtt ggtaattttt cttatgaacc    540
atgcagttgt ctagttcagg ccattttagt atgcagtttt atctttgctt ccaacatgat    600
ttaatgttcc caaattggat ttcacataat cctagtgtcc tttgagactt gaattggttc    660
taggccaaaa aagggtgagg gggaaggaag aaattcagag tcaaatttgg caaataatat    720
atccctgtcg ttttgttttt tcttttttaag acttgggccg ggtgtggtgg ctcacgcgtt    780
taatcccagc actttgggag gctgaggcgg gcagatcacc tgaggtcagg agctcgagac    840
cagcctggcc aacatggtga aaaatacaaa aattatccag gcatggtggc ccacgcctgt    900
ggtcccagct actcgggagg ctgagacagg agaatctctt gaacccgggt gagccgagat    960
cgcgccactg cactccactc tggtcgacag agctagattc catctcaaaa aaaaaaaaaa   1020
aaaaaaaaac tcgag                                                   1035
```

<210> 1091
<211> 458
<212> DNA
<213> Homo sapiens

<400> 1091
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ggcacgagca cctgtagatc cagctactca agaagctgag ttgggattgc ttgagatcga     60
gaggtcgagg ctgcagagag ctatgatggt gtactgcgct ccagcctggg tgacagtgag    120
atcatctctt gctctcaaaa aaagaaaatt tactactaat atttttgtgg ttctaaattt    180
tccaaaaact agaattatag tctacattct gcttgtaatt tgcatctttt aaatttagaa    240
atataagatg aatttcactt ttattatatt ttctttgcat ccacttcatt atttaaaatt    300
tatcattgct taaaacaatt acatcagtag taatgtttat tataaaaatt tgattcacct    360
ctttatgtgg caagtttctg aaatcacata tggggcaaga gtatcgtgtc cctctttgga    420
aaatgccatc tgccatagct tccttgagtg cagggatt                            458
```

<210> 1092
<211> 1610
<212> DNA
<213> Homo sapiens

<400> 1092
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tgcaggaatt cggcacgagg caagatctct gtctgttaat ctgcctcatg aaaatgacga     60
accaggagaa tctatgggac agtaggaaaa gctgccagtc actcagatga taataacatt    120
taccttatac atttataatg gaaatcctgc cactgtttac accagaaaca gtttcttttt    180
ttttttttaa ttttattatt attatactta aagttttagg gtacatgtgc acaacgtgca    240
ggtttgttac atacgtatac atgtgccatg ttggtgtgct gcacccatta agtcatcatt    300
tatcattagg tatatctcct aatgctatcc ctcccccctc ccccgcccc acaacagtcc    360
ccgatgtgtg atgttccccc gcttcctgtg tccatgtgtt ctcattgttc aattcccacc    420
tatgagtgag aacatgcggt gttttgtttt ttgtccttgt gatagtttgc tgagaatgat    480
ggtttccagt ttcatccatg tccctataaa ggacatgaac tcatcatttt ttatggctgc    540
atagtattcc atggtgtata tgtgccacat tttcttaatc cagtctacac cagaaacagt    600
ttctattgag aaaatggatt ttaatagaaa attctcattt aaaatttggg cagatatctg    660
tattgttgag ttaaccaaat gagaagagaa aaatccttac aacgtagctt gtcatttgcc    720
```
```
                                     639
```

```
tgacttgatg cagactgctt tgcttagtaa tcatgcagca ctatcaagac tgtgtacata    780
atgtcaggat ccatctacat aagatgtagt atggactgat gccaagtgag cctggggtgg    840
aaatcagaac tggatgcaaa tcctgatgtt atccgagaac aggcacctgt tacataggct    900
gtgttactgt ggcaaaggta atggtaaaac acagactggc cagaagcatt gtgtacaatg    960
agaccttgca actttgtgta tattagtatg tggggggatg tgaattatta aagacattta   1020
aaactgactg aatcagcaac ctctaatcta taaaaaaaaa ttccagacgt ccagccgggc   1080
acgttctcgt gcctataatc ttagtgcttt gggaagctga ggcaggagga tcacttgagg   1140
ccaggagttt gagaccagct tgggcaacat agtgagaccc ctgtctctac aataaaagta   1200
aacaacttag ctgggcataa tggcatgtgc ctgtagtccc agctactcaa gaggtggaga   1260
tgggaggatc acttgagccc aggagtttga ggctgcagtc agccgtgact gcaccaccat   1320
actccagcct gggtgacaga gcgagatctt gtcttaaaac aaaacaaaac aaaacccaga   1380
cttcctataa ttcctaaaaa taaatgtggg tttgagaggc ctaccttgaa atgtacaaga   1440
tcctggccag acttcaccta tctaacaata tgctagtaac tatttgttga catgtcttaa   1500
agaaatgttc atcagggcct cagaaagcaa ggcagagaac aggtccctga aatttactag   1560
cttgcaccaa accatcagat aaagataggt taatatttga cagaaaaaac                1610
```

<210> 1093
<211> 1085
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (506)
<223> n equals a,t,g, or c

<400> 1093
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gatgggtgcc ccaaatgctt ggtccaccat catcgtgcct ggcatgaagg atgctgtgat     60
ccacgcactt cagacctccc aggacaccgt gcaatgtcgg aaggccagct ttgagctcta    120
tggcgctgac ttcgtgttcg gggaggactt ccagccctgg ctgattgaga tcaacgccag    180
ccccacgatg gcaccctcca cagcagtcac tgcccggctc tgtgctggcg tgcaagctga    240
caccctgcgc gtggtcattg accggaggct ggaccgcaac tgtgacacag gagcctttga    300
gctcatctat aagcagcctg ctgtggaggt gcctcaatat gtgggcatcc ggctcctggt    360
agagggcttc accatcaaga gcccatggc gatgtgtcat cggcggatgg gggtccgccc    420
agcagtccct ctgctgaccc agcgaggctc tggggaagcc gaggatcagg aagtttaagg    480
aagttgccca aggttgcaca gctcanaagg gcacagctgg gatgcagacc cagcccgtca    540
ccacttcccc agcctccaca ccaaggccca gctgccttct ccccatgtac tccgacacca    600
agggccaggt cctcagacga cagcacagca agctggtggg cactaaggcc ctgtcgacca    660
caggcaaggc cttgaggact ctacccacgg ctaaggtctt catttccctc ccaccgaacc    720
ttgatttcaa ggtggcaccc agcatcctga agccaagaaa ggctcctgct ctcctgtgcc    780
tccgaggccc ccagctggaa gtgccttgtt gcctctgccc tttgaagtcg gaacaattcc    840
tagcacctgt cggaaggtca aggccaaagg caaattcaag gccagactgt gacaaaccca    900
gggctgaggc ctgccccatg aagaggctga gcccccctgaa acccctgccc cttgttggta    960
cattccagag gcgcagggc ctgggggata tgaagctagg gaagcccctg cttcgattcc   1020
ccactgccct tgtcctggat ccaacaccaa ataaaagaa acaagtgaaa aaaaaaaaa   1080
aaaaa                                                                1085
```

<210> 1094
<211> 910
<212> DNA
<213> Homo sapiens

<400> 1094
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ggcacgagag catgtgtgtc aaggaccttg ctgggtcaac aattcatttg cctttgtctg     60
gagtctgcca gcagcagtag ctaatgtcta aaagacaaca ggggccagga gagaaagggg    120
aggaaagaac taagtctctc ctagtctatg gcatgctatc atggggtcaa gtaggggcag    180
ggaggcttca tggggcctac ctttgggatg acattacccc agtgggcatt gtttgggtgg    240
ttttctttta aactatttac actgatatga cagactcaaa ctcatatttg ctattctccg    300
agcacatgga aaggtaactc actctgtaca ttcagatatc aaactatgca ctgtgagggc    360
tacgagaagc gcaaacagta aacgcttggc aggagggaac acttcctctc tctgaggaag    420
aggctggaag ctggtcttcc ccctccaaga atacacgggt gcactgagtc tttatgcaaa    480
```

```
ggcaacactg agccatggcc aagggcatct ctgcggggac cctgggaaag gagcctgctt    540
ccaggtgttc cccaaagaga tggaaaacaa gacagtcatt tggaacagtg atgcataata    600
aaatgtatgt ggccacctta caatactgct aagttgctaa aatatataaa gttaatattt    660
gagttctatt tttataaaat agttctagat ttatggcaat ataaacgtgt atagcctttt    720
gattttaatt tctagttttg tgctttgaag aaatatatgt aagattaaag aactgtatat    780
tgtaagcatt atattcaaat tatttaaaaa ttgttctaag tctatattca ataaaaagta    840
atgccaagaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    900
aaaaaaaaaa                                                           910


<210> 1095
<211> 1654
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (450)
<223> n equals a,t,g, or c

<400> 1095
ccccgggct gcaggaattc ggcacgagcc tctttgaagt ttctagatgc accacttcct     60
gctcacagcc tggaattcgg ttaacaagtc agtgtcaacc tacctttccc ttcatgattt    120
atagactttt gggagtacct tctggtagct tttgtcttcc cataggaaag aggcccaatc    180
ccagtttgtc ctcacaaagc ggccagctcc gtgatatctc ttttgcgggc agagttaaga    240
ttgtacacag atccccacaa gtaccacgat ttttgcctca ggaaggataa agcacatgtt    300
tgtttctgct ttcgttttct tttttctttt tttcacgaag ccttatggag aagtatgttt    360
ctgctttctt tcctgaggaa gcctagcttc tgggccacgg gactgatcct gtctacatcc    420
tctttccctc cattctccat cgtgtctctn ccccgtctc accccacccc gtgcccctct     480
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cttccgccgg aggcctaggc agaaggaagc tggcctgagc caatcacacg atgacctctc    600
caacgcaacg gccacgccca gtgtccgaaa gaaggccggc agcttttctc gccgccttat    660
caagcgcttt tccttcaaat ccaaacccaa ggccaatggt aaccccagcc cccagctctg    720
aggacccagc tctgaaaggg cacgagttct ctcagcccat tccccacctc cccttccata    780
cccttcctg gatctccagt gcctgggcca ggaaagccct ctgggttccg ggaagccccg     840
tccaccctgg gccatggggc cggttggaag gatacttgga acgggaagca catgagaggt    900
gggcacccgg tgccgaggac atggacgagg gactggtggc tgggagggag aggagggccc    960
tgtccggcat gtgtgggtat tccccagaag catttgcctc ctgctgagcc tggtccctga   1020
gcggagtccc agggtgctca gctcttcagc tgacccttct tcccttattt attctctttt   1080
ctatttatat gtgtggctta ggaccctccg tgaacagatg atagagggca tctctcccag   1140
gtgacccttc ttttctgtcc caggagggtg ggtaattccc tttgggatgg ggctcccaca   1200
cctccctcag gtccccactc agaccagcac cagtgtctgc ctctgagaat gttggcagct   1260
cacagagagc agggccggcc cgggatgggg ggcaggtact ccccaccttc ctgcctcccc   1320
tcctgctcct catccctccc tcccccttta ttaccgtttt ttgtacttga tgccttctct   1380
gtgagcagtg gctctgtggg aaggagggag ccgggagcct ggtgggaagc cttccccaga   1440
gagatggctt taggggcttt atttaaagac tgtgatgatg gagccacgca aggctgcacc   1500
tctgtgtgtt gggagacgat gatgatgtcc attgctgtgt gatggcttgg aatttaattt   1560
attaaagtca aattggagtt taaaaaaaaa aaaaaaaaaa aaaaaaaaaa ctcgagggg   1620
ggcccggtac ccaattcgcc ctatagtgag tcgt                               1654


<210> 1096
<211> 1193
<212> DNA
<213> Homo sapiens

<400> 1096
aacaggtctt tcctgttttc tggacctgct agaaagcttc agtcagtttg gtccctggga     60
gagaaaacgc tcttcccatg acggctctgt ggaggccagg aatggggtag gtgggttgac    120
tgggagtact ccttcctgcc gccctggtca agggactagt gtgagtcggg agtgcatttt    180
tggaatgggg gcagggggtgt ttttcatgac catttatttg agtggttttg atggttatgc    240
atactcttta aatttgaatc caaatttttt gcaaaattac ttcccaatca gatcttgacc    300
cttagcctgg gacaccacaa actgaggtga attcyckgct ttgctcgtca caaatgccaa    360
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641

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actgactgcc ctttcacggt gtccatcttg ctgtcttttg cttctgtttg atttggtctg    420
catatctttt aatgtgtctg tttttgtttt gtttgtttta tttttatttt tcagttaacg    480
cacgcacaga cttacatgtc aagagtggac tttagacttt catgtgttaa gttgcttgag    540
ttacaccttg tgacccttct cccataacat ggtgtgagga cggactggga gccggtacag    600
actccagtgt ttacagcctt gctttcctcc caccgaccct ggccccaggc tgccccgggc    660
ctggcgggcc acccctctct atgcaaacac gtaaaagcca tgaatgctgg aatccaaaac    720
tgacgaggtt tatttttttc agagccagtg gctggtcttc catttacagt gtcactattc    780
cctgacggag ctgttatgtg ccgctctagc gaaggcccca gccgggatgc taggcctaat    840
tgttcagcgt ggagatggca actcacgtgg tgccctaggt gcagctgcgt ggtctggtat    900
acatgctgca aaattcaccc agttcccctc attttaattt ttctaaccta cagcttaatt    960
ttaataactt taaaacactt ctaaatattt attttggcac cagcgtcaag acaaataata   1020
tcctctccca ttattttcat aagtaacaca gattccctga tttttaaaaa ctaaaaatac   1080
agctaaacct ttcttatgta taaagtatgc ctatcatata cagggagagg tgggtaataa   1140
acttcctgta atgacaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa          1193


<210> 1097
<211> 983
<212> DNA
<213> Homo sapiens

<400> 1097
ggcagagaag gaccccaagt taaatctccc aagttaaggc tgagagctcc agctctcttc     60
cgaaaagctg gagctgccaa cccttccctt gggacctgcc gattatgcag ttttcttctg    120
atactagctt tggtttctga ggtattctgc cctctccctc ccctcttctc ccaaaacatc    180
tgcctctcct cagtccccgt ctgggtggtg ggtgcacaat accaagtgcc tgaaaagcct    240
gagagagagg gtctggggta gggtggggac cactggacac cccaagtgca aactgctgct    300
ttctgaccct tgcttgctta tgtactccct tttcaactgt gttgaatttt aatgacgttt    360
ttagtggtgt agaaatgcaa gtattttggc ttaacagcat gaagtctggg ttgcacattg    420
tatcagaggt gctgtaatct ttccagtatc tctgatatac ggctttctgg ttgaatgtca    480
ccctgggccc tcttgactgg ataaacaacc atgagggctc ttctctgtgg agctgccgag    540
agcttggtgg tagaaagcga tgtttctaaa caactgcagc ggctctttcc tgtctgaact    600
gcatcgtgtg tctgactgcc ttgctgtcca tacatacaga ctccttccca ggcccggctc    660
tgtgcagaac ttccatgttt taccacattt ttctctcctg aactcccttt gtcagcccca    720
gggtgttgag gctgggtcct ctctagcaat ctctaccttc agaagagact tttctaaata    780
ttttgctttt ccagttcttg ttgcttttgt cattgtgaag agtcacccag gatgctggcg    840
cttggtaccc taagatcaga agtggtgtgt gtgtgagctg tgagacatgc acaccctttc    900
agagtgatac tgtgtggtgg aaggactgtt agaactcaaa gaatagttaa taaatccagt    960
gtattaaaaa aaaaaaaaaa aaa                                            983


<210> 1098
<211> 847
<212> DNA
<213> Homo sapiens

<400> 1098
ggccgagcgc caatgaccaa tttctgacta accagccacc ttttctctct cttagctcca     60
cgtcagcact gagaccagac tcgagcaccc ctgtcctgta agcgagacaa aatggcgtgt    120
gttattttgg ggttttgtgt tttttggtgg gtttctttcc ttggctctcc agatttactt    180
ttggggcctg ttctaagtgc aaacccagca agtttcactt gtcctgccca ttagatacaa    240
ctacatcttg cgggggttgt ttctttcttg ttccacaatg aaattgcaca tccatctcca    300
ccccagctga tagcctgtta ataagcactg gtctaacaca gccaaccctc cttccacagc    360
gccatattaa tggaggaggg gaggaaggtg aaatctactg catgggattc aggaaacagt    420
tgtggttggt caggacggaa gttggggtaa gtttggttgg tcagagggag ttgtgctgga    480
gattgtgaaa aatgggttct tgaatgatct actataaggc agggaaggtt catttgtaag    540
tagtaatgtg aactgaattg cattaagagt gtgtggcctt tgttgtgata tactatgtat    600
tttcttatat gcatgagcca aactgttgca tcataattta gcactgatgt ctgctttat    660
tttgatcatc tttgtccacc cttattagtt cttggctgtt aaccgtagat agatcttgta    720
aatcccacaa cctttggttg ctgcattccc cttggttcga ttccacgcaa ggagccacaa    780
gtgagaactc cactgtcctt agaagaaagg gcatttttac ttttgaacca aaaaaaaaaa    840
aaaaaaa                                                             847
```

642

<210> 1099
<211> 282
<212> DNA
<213> Homo sapiens

<400> 1099
```
ggcacgagac agaatgctgt tgccaaaacc tgcacagccc tgaggccagc ctcggccttg        60
gtaacggggg aaagtagctg acagtgagac ggggctcctg gcccacgtgt ggggcacggg       120
catcctggat ggttggggag gcgccgacag gcacttcacg tattacaatt ggggatgtgg       180
gtgagggagg gaatctggtt ttgttacttg gcagtggttt tttctcaccc ttccttttta       240
acaataaaat cccatttggg tcttgaaaaa aaaaaaaaaa aa                          282
```

<210> 1100
<211> 2707
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (938)
<223> n equals a,t,g, or c

<400> 1100
```
gaattcggca cgagcggcac gagctccaat tcaaacaagg agaacatggc aaccttgttt        60
acaatttggt gtactctgtg tgaccgcgcc tatccctcgg actgtcccga acatggacca       120
gtgacttttg ttcctgacac tccaatagag agcagagcaa ggctttctct cccaaagcag       180
cttgttctcc gtcagtcaat tgtgggagca gaagttggtg tatggactgg agaaaccatt       240
cctgtgcgga cttgctttgg acctctaatt ggccagcaga gtcactccat ggaagtagca       300
gaatggacag acaaggcagt taaccatatc tggaagatat accacaatgg tgtcctagaa       360
ttctgcatca ttacaactga tgaaaatgaa tgtaattgga tgatgtttgt gcgcaaagcc       420
aggaaccggg aagagcagaa tttggtggct tatcctcatg atggaaaaat cttttttctgc       480
acctcacaag atatccctcc tgaaaatgaa ctgctttttt attatagccg agattatgct       540
caacagattg gtgttcctga acacccagat gtgcatctct gtaactgtgg caaggagtgc       600
aattcttaca cagagttcaa agcccatctg accagccaca tccataacca tcttcctacc       660
cagggacata gcggcagcca tgggccaagt cacagcaaag aaaggaagtg gaagtgctca       720
atgtgccccc aagctttta t ctctccttcc aaacttcatg tccacttt at gggtcacatg      780
ggtatgaagc cccacaagtg tgatttctgt agcaaggctt ttagtgatcc cagcaacctg       840
cggacccacc tcaagataca tacaggtcag aagaactaca ggtgtacctt gtgtgacaag       900
tctttcaccc agaaggctca cctggagtcc cacatggnta tccacactgg ggagaagaat       960
cttaagtgtg attactgtga caagttgttt atgcggaggc aggacctcaa gcagcacgtg      1020
ctcatccaca ctcaagaacg ccagatcaag tgtcccaagt gtgataagct gttcttgaga      1080
acaaatcact taaagaagca tctcaattct catgaaggaa aacgggatta tgtctgtgaa      1140
aaatgtacaa aggcttatct aaccaaatac catctcaccc gccacctgaa aacctgcaaa      1200
gggcccacct ccagttcgtc agcaccagag gaggaagaag aggatgactc agaagaggaa      1260
gatctagcag actctgtggg gacagaagac tgtaggatta acagtgctgt gtattcagcg      1320
gatgagtctc tttctgcaca taaataaaag gaaaagaaac aagcaatttt ggatgaaaat      1380
gcaaatggaa aaatacacat aaccagttat ctactataat ggttttttata taaaatggtt      1440
cctgatttat tttcagccag taatcaaaac agactgggaa tgaataaagc acttacagaa      1500
gagtatccta atgaaaacac tttaaaacag attgggaaaa ctgagcatgt gtcctrtttt      1560
aagtggtgga ctgggaggga agtgtcaact tctgaggtct ttatttacat gataatctgg      1620
gagatgcatt tatgcctgaa tcaaagctgc cttctgctca aacaaatcag atttatttca      1680
cattcttcca ttattccatt ttcctgctgg tcctgtgact tggtaacatt ctaaacggtc      1740
cttgccccat agccatcctg attgctgata gtgtttatg cagactcttg tgacttatac      1800
tcaccacaga atggattggg acacagcagc ataagtgtgc tacttggcag ctagtaagtt      1860
taaagcagga cctgccttaa ctgctcctgg ccacttggaa gtttagggta gatcttgttt      1920
tccaaagttt cggcaggtgc ctggagggca aataaaaaag cagcagtcag tcagtagtca      1980
gtgatggaga gaacaagagg agagatgcct ggcctctgcc caagaaatta gctttgatgg      2040
aagcctgagc aagtcacctg gttattgtaa cgtggagatc tttgtaggtt tagacatggc      2100
tccctgtctc cagtaaacat ccagccattc agacaaaggg ggcctggaga tacagagagc      2160
ccaaataatg cctgctggat tgtctcctga tgagtacatg tggactcacc tgaggaaggg      2220
aaggaaggga ataatctttt atgtttcatt taccttatga aaagtgttaa aacattgcca      2280
```

                                                                       643

```
actcaaaata acattattta atgcatgtgc aaagttaggt cttcccagtt gtctcagtgc    2340
tgaggaacct catcagagaa gcatggaaga tgccaaagga ttttttggaag gtaaagaagg    2400
ctgaatagtg accacatggg cctgtttttca gggtcccagc ttagttaagt cacccatgca    2460
cctggtcatt gtgtctcccg tgcacatcca gcgtttctca gaagcagacc caccccttaag    2520
ttgacaggat tgatggaaca tgctctcctg ctcaaggcac aacctctggg ctggagtaga    2580
ggactctggt gggaaggttt tgctgctaat gtatttatgg aatgaatgta tttcattcaa    2640
atctgtattc ctctaggaag gattaaaatt aaacttttttt aaaatamaaa aaaaaaaaa    2700
aaaaaat                                                              2707
```

```
<210> 1101
<211> 429
<212> DNA
<213> Homo sapiens
```

```
<400> 1101
ggcacgagca cgggatcatc catggggtca cccatgacgt ggagctgcag gagtctgtca     60
tcactgtggt ggccgcccgt gtcctccgcc agacaccgcc gctgttccag gcggggcgat    120
ccggggacca ggggctgacc tccattcgta ccccactgcg ctgtggcgtc cacccgggcc    180
caggcacctt cctcttcatg ggctggagcc gctttgggga ggcccggctg ggctgtgccc    240
cacgattcca ggagttccgc cgtgcctacg aggctgcccg tgctgcccac ctccacccct    300
gcgaggtggc gctgcactga ggggctgggt gctggggagg ggctggtagg agggagggtg    360
ggcccactgc tttggaggtg atgggactat caataagaac tctgttcacg caaaaaaaaa    420
aaaaaaaaa                                                            429
```

```
<210> 1102
<211> 1721
<212> DNA
<213> Homo sapiens
```

```
<400> 1102
ggaccgagca gctggtagcc ctgatcgatt gcttcctgga tggttatgtt tctcagctta     60
agtctgtgga taaatccagt aatcgggaaa gatatgacaa tctggagatg gaatacctac    120
agaaaagatc agatctctta tctcctcttc tttcactagg ccagtacctg tgggctgctt    180
ctctagcaga gaaatactgt gactttgata tattggtaca aatgtgtgag cagactgaca    240
accagagccg actccagcgc tacatgaccc agtttgctga tcagaatttt tcagactttc    300
tcttccgttg gtatctggag aaaggaaagc gaggcaaatt attatctcag cccatttctc    360
agcatggaca gttggcaaat tttttgcaag ctcatgaaca tctcagctgg ttacatgaaa    420
ttaatagcca agaattagaa aaggctcatg caacacttct gggtttgcaa atatggaaac    480
tcgttacttt gcaaagaaga aaacccttct tggcttgagt aaattggctg cattagcttc    540
agacttttca gaggatatgc tacaagaaaa aattgaagaa atggctgagc aggagcgctt    600
tctactgcat caggagaccc tacctgaaca gctgctggcg gagaaacagc taaatctcag    660
tgcgatgcca gtattgactg caccacaact cattggtcta tatatctgtg aagaaaatag    720
aagagctaat gaatatgatt tcaagaaagc tttggacttg ttggaatata ttgatgagga    780
agaagatata aatataaatg atctaaaact ggaaatcctt tgcaaagctc ttcagagaga    840
taactggtcc agttctgatg gcaaagatga tccaattgaa gtatctaaag acagtatatt    900
tgtgaagatc ttacagaaac ttttaaaaga tggcattcag ctcagtgagt acttaccgga    960
ggtgaaagac ctgctacaag cggatcagct tggaagctta aagtccaatc cttacttcga   1020
gtttgttttg aaagcaaatt atgaatatta tgttcaggga caaatataac ttttttctaaa   1080
aatggccatt gtttatgaaa tctgtataag tgtgtcctta tacaaatttt aggccataaa   1140
caagtgtaag tttgtacaat ttcataacat gtatagctga gtttttatac tttatatgta   1200
ggaagctaat ataaaatagt tatgtaactg tgattttggt tttcagttat gtgacttgtt   1260
ttttccacct gaaatgtgtc agttgttgtt cctgtactcg gtgcccttttc tttttactct   1320
cacgtggtcc caggttctgg agttcttgtc ctggttctag ctgctcacat gtacaaatca   1380
cttctaggcc tcagtttctg cgactatgaa aattactaga ttgcactagc ttgtctctaa   1440
aattgctgtg actccagata ctttgcactg aagagaatct agggtgtttg atatctgttt   1500
cagttagggc taatgggaaa tgtctagtaa gataaatgtc aacttttgct gacttattat   1560
gagatgaaaa accaaaggag agtgggccta actcatgtga gcttgataac tgatgaactc   1620
attgggagca ttttaaactt ttctacataa ataataaatg agcactaatg aaagtaaaaa   1680
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a                       1721
```

```
<210> 1103
```

644

<211> 1287
<212> DNA
<213> Homo sapiens

<400> 1103
```
cgtgccgaat tcggcacgag ctaaagattt ttagactgac tgtgggttca ctggaataaa      60
aaggaagaaa caaagagcat tgcaggcatc gggactgtca catttgacaa gatcaaagct     120
gcaggaaaat ggacagtgag gttcagagag atggaaggat cttggatttg attgatgatg     180
cttggcgaga agacaagctg ccttatgagg atgtcgcaat accactgaat gagcttcctg     240
aacctgaaca agacaatggt ggcaccacag aatctgtcaa agaacaagaa atgaagtgga     300
cagacttagc cttacagtac ctccatgaga atgttccccc cattggaaac tgacgcttgg     360
ctcctttctt gtggatggat tttctcaaag tacacagata aagcatggtt tgtttcagtc     420
tccaaattca aacctttgag taataaatca gcactcaaaa atgtacaccc atttagtttg     480
tggtagcaaa gtgcaatgcg aaattgaatg agaaactgag atttctcagt aatggtgaat     540
atttcgctct ttaaacctaa aactcttcat tgagtagctt atatttgaac atgattggtt     600
taacatttgc ctctacctct gattttgctt tgctgtcaaa gtttaacàcc ttccaactac     660
ttatgtgtgt cctgtaacac aggtgattga ccgtatgaga ggggaaaggc aaagaaaaag     720
gaagccagac actaggggaa ttattaactt ctcatacttc cccacattga gaagcattcg     780
gagtgtattt agccctgtag atgttgtgat atgcaaatat cccattccct ggttactggc     840
attcctaaga ttcttcatgg tattttcaaa ctttggataa atttacagat tagaaagata     900
tctgacagtt aatctctgtt ctccttacaa attccttttg tgctgctgga aaggatcttt     960
ggctaggtgg atgactagtt ttattcaaag ccttttctca aagccctttc agttacaacc    1020
accccactat ggaatcagta tttagttata catttgtata agaacctgta ttttgaaaaa    1080
cacattcatg tatatttatt cctggcatta tttgcctgtt aaacagtgtc tttcatgttc    1140
tctccccaga ttgtaaactc tgtaagaagc tgcttgtatc tgtatccctt gttgaaactc    1200
tgaaaacact gaataactaa aatctcttct catcctttta aaaaaaaaa aaaaaaaaa    1260
aaaaaaaaa aaaaaaaaa aaaactc                                        1287
```

<210> 1104
<211> 1290
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1279)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1284)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1286)
<223> n equals a,t,g, or c

<400> 1104
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ccaccgcggt ggcggccgct ctagaactag tggatccccc gggctgtttg aattcggcac      60
gaggcctggt gcattccgag gctacatcca ggctcatgga aggagtgtag tattcattta     120
gccatgtctg ccatgggtcc agaaatggga aagggaattg ctgtccttgc cctgtggtat     180
gctgccacct ctttgggaag caggccttgc ccctgtccca ccactcattc tcagctttga     240
atgggaggcc tttctatagt ggaggccttt ccttgaagcc tatgaactgc aggccccctt     300
ttgccattga tctcaaagca cttgtcctca ggatagggaa gagcaggggg atgcaggaat     360
agcagggata gcttgctccc agccccctcc ccaatttggt tccgttgaca taggaatttt     420
acgattccca aaccatgcag gggctgagcc ttccttatga tgactttgtt ctccctccca     480
ctgggggaat cctccctatg ccttaaaact gccgagcccc actccatgta ataggattcc     540
tgggcttcct caatgggggt tcatgttctt ggactgcggg ccctcagtcc ttaactggaa     600
agtgaccgtc cactgcccca tggagcccat ctggacacag cacagcccca aaaccgttag     660
cagctggctc tgtttccaag cctggggagg ggttcctcag tgcaggagtt ggggacaggc     720
```

645

```
tggggatcca agctgcttga gggggtcaac cttggaccaa agttgcctta agcctgtggt        780
aaaagggctt cagggaaggt aagtgggcca cctgctggaa gctgccagct gcccggctgg        840
caatggtgtg agtgtcttgg ccctgtccct gccctggggt ccagcaggtc atccctccct        900
tcttctctct cctttggcgt ttgttcctgt agtcactggg ctaatctccc cctagcttca        960
agctgtacat agggcctccc agtgcaaatc ctcctgccca taccgtgcac ccttagaagc       1020
ctgcgtgtgc atagagcgcc ccctacttcc cagttaactc ccagttcttc tccctgagct       1080
tggtatttgt catgtgccaa ctctgactct gaggtgggca gtgagggaag cagccccggg       1140
cctgcttgct tcctgtcccc gaaatgttcg tttcttctga agtaaatata catatataaa       1200
taaatgtata aatactgctt tgtatctgaa aaaaaaaaa aaaaaaaaa actcgagggg       1260
gggcccggta acccaattng cccnanaagg                                       1290

<210> 1105
<211> 1037
<212> DNA
<213> Homo sapiens

<400> 1105
aattcggcac gagaacaaac taaggcagaa atactaaaaa tatctggttc aataacatag         60
gggcatggag tagacatgca gaaaatgctt gttcacttgc cttgaaatgg ctccaggtgg        120
cctgaaggaa tcaatgaaac ttctcaagta tctacattac aaccactggt ccccactaca        180
catttatttc taaataaagg aggagaaact ctagcaaagt aatatttaac attttcattg        240
cttccaggat aaatcttatt gaatatggag gatctgatag tggtaggtct atcaggaata        300
tcagggaaaa tgctttttgat gttgttggca aagtcaattc ctatcatttg tacttgacac        360
cagctaccta gcaggctcat tgtgaacttc aggtttcgcc cacgttattt atataaagta        420
tctcagtgta atatagggag ttgctggtta tttgaaaata gtaacaaaga taacccaaac        480
gagaaactcc atttccataa ttagctttcc tgaaagtcag gcatgtcttt gaggacaggt        540
tttggcagta ttattttgt gcacaggagg aaaattgtta gtaggtttat agatgttatt        600
tttataatag aatgttaaac ccctgaaaaa catcaaaaat tgtctcctag aactaattct        660
atgttttaaa aacttgtttt aaaaaggatt ctaaatagca ataggtgtct tcctcctttc        720
tccactccaa tggtttaatg ggatagagga atcaatgttt atattttaa acctgtaaat        780
attttatttt gggtattttg tatatttgtt gatataattc cattttgtgc atatgtacca        840
ttgtgcatgt tgctgttttt gatagtcact ctttaatga atgtaagaag cttgggctaa        900
tagcactttt cttgttccat tcaaacatct gaaaatgaaa ttacaacact gccattttac        960
tgttgtgttt aattcagtca ataaattttg ttgctccttt ccatttaaaa aaaaaaaaa       1020
aaaaaaaaaa aaaaaaa                                                     1037

<210> 1106
<211> 946
<212> DNA
<213> Homo sapiens

<400> 1106
ggagctttta agtttggcct ctcacactct cccacacctg ctaaatcctt ataaatgttt         60
cttctcttcc ctcaaacttc cctcactgtc ttatttgttt cttgccctgt ggaaggcagt        120
agggtacaca ttcttcttag tgtaaatatg ccttggaatt tgcacaaggg caggacaatg        180
tgttcttttt tccaacagct gttttgatga tgcttggcaa catgttggta tttttggccc        240
gagtagcaca tattgagacc acatcctcaa ggaatacttt ttgatctctc ccaagtctct        300
tttctagact gaatggtttg gattttccat tgatgaaaaa cattcccctt ttcttgccca        360
catgagagtt tatctgcccg tttttctgat catctctctc ctcttgttta cagcacatgc        420
aaaagtctct tgggctcttc ctatagttta taactttgt tttagtttta tattacctgg        480
aatagcttag gatcatctca gagggactct ggcatagtcc ctcttggaga tcaggatgc        540
caggaggggc attaaggatg gagagatcag gtgaatagtg aaggagtgat actggacaaa        600
ttgtaaagct ctaaagctcc accaggtgga ggagggcaca ggtgctgaaa gacaagagag        660
gtaagggaaa gcctagaatc aagtcagagg cacagcaaac aaaagtaccc caagcaagcc        720
agttagacca agagagaggc tcattgtcct gtcttttctt tcttatgggt gcgtggccct        780
gaagcaggag attctgmtct tgaatgggaa agggttttca agagactctt tgaccagttc        840
tccatccatg agaatacatc tcaattacca tggagacttc catcttaaaa atagccattg        900
agtggaatct tagtgcaaaa aaaaaaaaa aaaaaaaaa ctcgag                      946

<210> 1107
<211> 1636
```

646

<212> DNA
<213> Homo sapiens

<400> 1107
```
aattcggcac gaggtcactg ggagaggcct atgccagaga aactgaggat gaggaggcgg        60
aggctgacag aacatccaga agaggctgga ggctgcaagc ggtggctgtg ggcctcccgg       120
accgtgagga tgcacagact ggctctgtgg ctgctgggat tatggggggt gatgtggtcc       180
cacacatcag cgctgctggc gctggtgaag ctttggaagg ggcgcttggg caaggctggg       240
actcgaaaga aaaggaagag gcagcagcag gagagcatgc aggtgggcaa gaatttggtc       300
tggagggctc agcagaggaa gaggtgactg gcagaggcag ccaagtagag gctttttgagt      360
ccagggaggg aggaccttgg ggagggcggg tagaggccga ggaatctgca ggcgcagagg       420
acagctgtgg gctggatccc gcgggctccc agacagcgag ggcagagggg atgggagcca       480
tggtggaggc tgggggggctt ctagaaaagt ggacgctgtt ggaagaagag gctgttggat      540
ggcaggagag agaacagagg gaagacagtg aggggcggtg tggggactac caccctgagg       600
gagaggcacc aaggctcctt gatgcagagg gtctcatggt gaccgggggc cggagggcag       660
aggccaagga gactgagcca gaaagcctgg aacatgtcag gggccaggag gagcagccaa       720
cacaccaggc ccctgcagaa gctgcgccgg agtcagtcgg ggaagccgag acggctgagg       780
ccatgggcag tgccagagga ggtgctgcca acagctggag cgaggccccg ctccccgggt       840
ccctcctaga cgtctctgtc ccaaggagtc gcgtgcacct ctcgagaagc tcctcacagc       900
gtcgctcccg gccctctttt cgtcggactc cagcctggga gcagcaggag gagcccccag       960
cccccaaccc tcctgaggag gagctgtcag ctcctgagca gagacccctc cagctggagg      1020
aacccctgga gccaagccct ctgaggcatg atgggacccc ggtgccagcc aggagaaggc      1080
ccctgggaca cgggtttggc ctcgcgcacc ctggcatgat gcaggagctg caagcccgtc      1140
tgggccggcc taagccccag tgactgagac ccggtgctct gggagccagg ccctgagtgg      1200
gtgccagaag gcttgctcca atgccactga gccctgctcc ctctgccact gtggacacat      1260
cctctccacc ctctgggcct cagtgtcttg atgtatcatt catggagcag gcaaaaccag      1320
acgtctggga agaccgtgaa cttaaggagt ctgattctcc gacacaggct ggtggaccac      1380
gtaccccact gagaccacct ctcagggtgc ctgccctggt tcctccccag cctgagtcag      1440
ctgtctggac tgcaaggagg ctgggcacgg ggctcacgcc tgtcacccca gagctttggg      1500
aggccaaggt gggaggatcg cttgagacca ggagttcgag accagcctgg gcagcatagc      1560
aagatcccca tcttttaaaa acaaaataaa acaataaaga ctgcaaaaaa aaaaaaaaa       1620
aactcgaggg ggggcc                                                     1636
```

<210> 1108
<211> 409
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (388)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (401)
<223> n equals a,t,g, or c

<400> 1108
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gacaattaag cagcatatca aggttcatgt aagttacagt tattaggttt aatatttagt        60
tttaatattt ttcacccaac atcttgttgc atcttccaga ataaatctgg ggtccataaa       120
ccaaaccagg agagggaaaa tggaaagagt gggcagaaat ctgacagctc ttaggtttct       180
tctatttgtg ttaatactga gacttttaaa aatcattttt atatgtagtg tttattatga       240
atagttgtaa tttgttctga taaattagtt gtattaaaca ctgttatttg gctaatatta       300
ctaggtataa taaaatgata tttagtggga agacattcat caaagtagaa gtagttaatt       360
tgggccaggt gcatggctca cgcctgtnaa tcccagccac nttgggagg                  409
```

<210> 1109
<211> 1652
<212> DNA
<213> Homo sapiens

647

<400> 1109

```
aagcttggca cgaaggccac attagtggag ggagcaaatc tctgcttgga ccttcgtcag     60
tttggaattg tgacaattgg agaggaaaag aaaatttgta ctgtctctga gaatttcttg    120
aggatgtgcg aatctactga gctgaacatg accttccact tgtttattgt ggcacttgct    180
ggagctgggg caaggaattc tgacagaaac acaacaaggg ttaatggtag ccagccctgc    240
tcagaccctc aatgacacgc tggatgacat catggcagtc agtggaagag catctgcaat    300
gtcaaacact cctacccaca gtattgctgc atccatttcc caacctcaga ctccaactcc    360
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tttagcctgc ttccaaggaa gaactgaagt ggttagtctt ctgcttgata gaaaagcaaa   1020
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gcttcttatt ggcaggggag ctcatattga tgtacgtaac aagaagggga cactccatt   1260
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tatggagtca atagtacaag ccaaagatag acaggctgct gaagcaaaca aaaacgccag   1560
cattttgtta gaggagttag acttggaaaa gttaagggaa gaaagtcgga ggctggcttt   1620
ggctgcgaaa agagaaaaaa aaaaaaaaa aa                                   1652
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<210> 1110
<211> 1528
<212> DNA
<213> Homo sapiens

<400> 1110

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catatgtaag gatcaacttt tgtttgcttt gcttatagtc tgtaatgctg tgtattccaa    180
cacctggtcc ttcagcagtg gcagtggtat gtggattaat ttaaccaatc aagatcccag    240
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caactcagag accctctcct gggtgatata tagaaactga agggagactt gcaatttgac    360
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tcttattaca ctaactccta aaaagcttaa acacttatat ttcaaatgca aacagattgt    540
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tatacccaca actgtgctac ttagagattt attttcagga ccaacaacat ggctaataaa   1140
tacttccaaa taaattaaaa ttttcctcac acacagatgc aaaaccgtaa cagaagcctt   1200
gataaatcag ttcaccaaca aacccatatt gtttgagtta caacggtggc aactaaaaat   1260
gtcacggcct ccttcattgt gttccttttc ctttgctttg tcttgcaaca acccaaagtg   1320
agaaaatgaa atgatcttca gaggtgattt ctaacaaagc ttatgtgtta aatacaccaa   1380
gatcttctca tcccaggaaa gcacagctaa agcaagaatg ccgtgctatg gccaagaaaa   1440
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648

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<210> 1111
<211> 1790
<212> DNA
<213> Homo sapiens

<400> 1111
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atgcctttga gtgcatattt tcttcctcgt ctgaaaccga actcccaaag tggctttctt    180
tagccctggc tggaaaacca cctctcaata gccttaagca ataaatagat gagtagagaa    240
tgtggcttca actgggctta ttaaagtaag tgtgtctagt tttcacttga acaagtgata    300
gctgcagatg gcgaaagaaa cccatttaat ttttgtagct tacaggtggt agaaacaaaa    360
atgcaatttt aaaaccttaa ataccaaata ccaaccattg cctttttttt ttttgagatg    420
gagttttgct cttgtcaccc aggctggagt gcaatggcgc gatctcacct cactgcaacc    480
tctgcctccc gggtccaagt gattctcctg cctcagcctc ccaagtagct gggattacag    540
gcatgcgcca ccacacccag ctaattttgt atttttggta aagacagggt atctccatgt    600
tggtcaggct ggtcttggat tcccgacctc aggtgatccg cccacctcgg cctcccaaag    660
tgctgggatt acaggcgtga gccaccatgc ctgcccagca ataccaacca ttgtctttta    720
aattcgtgtt ggcttctcag acagggagat cactggaata aaataaccga tggtcttatt    780
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gtaaagacct tgctgtaaag attttgtaat aaaatggtct aagggctctt tttccaacat   1440
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taacacaaga ccctgtaaat acatgataat tgcacacaga ttttacatat ttgcagacca   1680
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<210> 1112
<211> 2324
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> n equals a,t,g, or c

<400> 1112
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aaaatgacac cgtgattgag cttgtcagca gagctgaaag agaaagtaga aggatgtgca    180
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gtccatttgt ccactgagaa attataaact agggacaagg gggaggaaaa gtactgaaat    300
acagtttatg aagcaagtgt gtctcgggct gtgcttgtcc caggagcccc agcagcatct    360
gaactgaggc ttcttcagtc ctgcaggaac aggatcatct gtctcagcgg tgggcagatg    420
ttttcataga cagccaggga gtaaacactg ttggctctgt gggctgtatg gtctctgcca    480
taaatagtac agagatgtgg ctgtgtctag tacaactttt agacacagaa atctgaatga    540
catatattgt tctgtgtcaa gaaacttaga ttttttttt aactatttaa aaacgtgaaa    600
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649

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cttcgtggtg agcactgcag cctccctggg cattccctcc agcgccagca ccactgcaac   2160
atatagacct gagtgctatt gtattttggc ttggtgtgta tgctcttcat tgtgtaaaat   2220
tgctgttctt ttgacaattt aagtgattgt tttgtttact gtaagtttga aaataaaaat   2280
gaagaaaaaa attccaatga caaaaaaaaa aaaaaaaaa aaaa                      2324
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<210> 1113
<211> 2913
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2288)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2753)
<223> n equals a,t,g, or c

<400> 1113
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atctgtctga cagcctgcca cccgtttgtg acacagtagc cactgactta tgttccacag    180
gcattgatat ctgcagtttc agtgaagata taaaacctgg agactctctg ttactgagtg    240
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tgcagccgaa cttggaagcc actgtatcca atggaccttt tctgcagctt tcttcccagt    360
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ctcctgtgac agtgaaacgg gagagcaaaa tttctcttca acctatagca actgttccca    600
atggaggcac aacacctaaa atcagcaaaa ctgtactttt atctactaaa agcatgaaaa    660
agagtcatga acatggatcc aagaaatctc actctaaaac caagccaggt attcttaaaa    720
aagacaaagc agtaaaggaa aagattccta gtcatcattt tatgccagga agtcctacca    780
agactgtgta caaaaaaccc caggaaaaga aagggtgtaa atgtgggcgt gctactcaaa    840
atccaagtgt tcttacatgc cgaggccaac gctgcccttg ctactctaac cgcaaagcct    900
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gcttagattg tatatgtcgt grctggsaaa acycctatat ggccaatggg gagaagaagc    960
tggaggcatt tgccgtgcca gaaaaggcct tggagcagac caggctcact ttgggcatta   1020
acgtgactag cattgctgtg cgtaacgcta gtaccagcac cagtgtaata aatgtcacag   1080
ggtccccagt aacgacgttt ttagctgcca gtacacatga tgataaaagt ttggatgaag   1140
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ttctaattgg gataaatgaa ggagagtagt tttattctga aggtaattaa atttagacta   1920
tgtagtatgt gacagaattt ttttaaaatt atwaaaagrt tttatttagt aattgggatt   1980
tacttaaaat aattttggaa taatgctccc agacttgccc agatttgtgt attgtactta   2040
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tgaaataacc tgtgatttaa aagaagagct gcagctttga cagtgcttat ttaaagaaaa   2460
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ccataggaag aaaaatgtga tgtgtccagt atgtactatt ttgtttttgt tttgcaagaa   2820
gagttgaact atttttgata acaagagtaa atggtggaaa atgcttaaaa aaaaaaaaa   2880
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<210> 1114
<211> 424
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (409)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (416)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (417)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (421)
<223> n equals a,t,g, or c

<400> 1114

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cagtgtctct tctcttcagc tatgactggg gagtagatga ccgtgcttgt ttctgacaca     180
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tagtggttcc cttccttccc tcctcaccaa taggcagcct caggcctttt ctgtgtataa     300
ctgtgtatat agacataaaa acctacaaat gtgaaataaa tctatgctat ctttcatagt     360
gttaccacaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaang ggggnnccc       420
ntta                                                                  424


<210> 1115
<211> 1844
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1699)
<223> n equals a,t,g, or c

<400> 1115
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cargaagatg ctgagtacca ggctttccgg gaggccatca ctgaggcggt ggaggcacca     360
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gcggccccag cgggaaggag gagcaaggac atgtaccatg ccagcaagag tgccaagcgg    1380
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cagagctgcg gggtcccatc tggacactta cttgcccacc tgccagtgtc ttgggcattt    1800
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<210> 1116
<211> 2124
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> n equals a,t,g, or c
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<220>
<221> SITE
<222> (76)
<223> n equals a,t,g, or c

<400> 1116
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gacaggtttc ccgactggaa agcgggcagt gagcgcaacg caattaatgt gagttagctc     180
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gtgagcggat aacaatttca cacaggaaac agctatgacc atgattacgc caagctctaa     300
tacgactcac tatagggaaa gctggtacgc ctgcaggtac cggtccggaa ttcccgggtc     360
gacccacgcg tccgagttaa tagacacttg aattgttttc ggttttttggc aattaggaat     420
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ctgtgaatac tcataaatgg gactgctcag ttatatgata aatatatgtt taactttgta     540
agaaactgct gaattatttt mcaaagtggt tgtaccatcc cgcattccca tcagcaatgt     600
ttggaaattc cagttgctcc acatacttgt tatgggtcag tcttttttaat ttcggccatt     660
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tgatgttgag tattttataa tagttattgg accaaaggga gttcttcatc tttgtaacat     780
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ttgtcatgtt tctttggttt cttttaatct cagtttttctt tgtctttctt agacctcaac     960
ttaaaaaaaa ataataaaaa agcataggcc tattattttg taacatgtct gtcaatttgg    1020
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tactgcatcc catgaatttt gatatgtaat tttttattatc acttagttca aaatatttcc    1560
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tgtgtgtgtg tatgtgtgta tcagcaacta taaagatctc agtattttga aatgtattga    1740
aacttatttt atggttagtc tattctcaca ctgctataaa gaactgcctg arcgtgggta    1800
aatttacaaa gaaaagaggt ttaattgact caaggkktaa ttgactcaag gttctgcatg    1860
gctggggagg ccttaggaaa cttacaatga tggcagaagg ggaagcaggc atgtcttaca    1920
cagcagcagg caagagagta tgtgagagca caggaaaaac taccgtttat aaaaccttca    1980
gatctggtga gaattcactc actatcacga gaaggcttag aagaaaaccc cacaaacccc    2040
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aaaaaaaaaa aaaaaaaaaa aaaa                                          2124
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<210> 1117
<211> 2312
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (239)
<223> n equals a,t,g, or c

<400> 1117
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gagggcgcct gccgaacccg ggacttcgtg gtaggagcgc ttatcctgcg ctcatcggca     120
tggacccgag cgacatctac gcggtcatcc agatcccggg cagccgcgaa ttcgacgtga     180
gcttccgctc agcgagaagc tggccctgtt cctacgcgtc tacgaggaga agcgggasna     240
ggaggactgc tgggagaact ttgtggtgct ggggcggaca agtccagctt gaagacgctc     300
ttcatcctct tccggaacga gacggtggac gtggaggaca ttgtgacttg gctcaagcgc     360
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crctgcgacg tgctggccgt gccggtgaaa gtgaccgaca ggtttgggat ctggaccggg       420
gagtacaaat gcgagatcga gctgcgccag ggggagggcg gggtcaggca cttgccaggg       480
gccttcttcc tgggggccga gaggggctac agctggtaca aggggcagcc caagacatgc       540
tttaaatgtg gttcccggac ccacatgagc ggcactgcac gcaggacagg tgcttcaggt       600
gcggggagga ggggcacctg agcccttact gccggaaggg catcgtgtgc aacctctgtg       660
gcaagcgagg acacgccttt gcccagtgtc ccaaagcagt gcacaattcc gtggcagctc       720
agctaaccgg cgtggccggg cactaaacac ccgcctgcct gccagggtga acacacagcc       780
agcttatccc tcttaagtgc caaaactttt ttttaaacca tttttttatcg tttttgaagg       840
agatcttttt aaaacctaca agagacatct ctctatgcct tcttaaaccg agtttactcc       900
atttcagcct gttctgaatt ggtgactctg tcaccaataa cgactgcgga gaactgtagc       960
gtgcagatgt gttgcccctc ccttttaaaa ttttattttc gtttttctat tgggtatttg      1020
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ccttttcttc ccctggattt tcaccctttg ggctgccttg ctcatcttta tgccccagca      1140
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tgttgactgt ggcttctatc agagtgtcta cctttttgcag ctcttcccct ccctcattta      1260
atttgctgct tttaatctac gtggtctgag aatttgtgaa accagtgttg ttagaagtgt      1320
atataatctg aatcaataag ctctgaatgg tggccaaggg ctctcttatg gcacaaagat      1380
gcatggactt catgacagct cttttggtgg ctcagaagcc atttttttata gaatcatgga      1440
atctagaata ttcctgctgg aaagaacctg agagttggtt tggaccaatt ccctggtttt      1500
ccagcagatg aaacaggccc aaagaggtta aatgactggg tgaaaatcac atagctgtct      1560
ggtgccagag ccagcctata gtagagtccc ctgaccccaa gcccggtgct cattccacta      1620
cctctcacac ttcacaacaa tttcctcaac acttgagggc ccagaaagtc tgatctctcc      1680
agaatgatca gcccagagga atgctgagaa atcacctgga ggagggagca gaaagagaag      1740
gtttttaagg aggggcttct gaatacttgg gagatacgga acggaccaag gaccacactc      1800
caggtgcat tcgttgctcc ctggggcacc acttctggat tacagtgtgc caggtccttt      1860
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aagaaaccta ccaaaggttt acatttgcac cttagcctca atagctacga accctagaga      1980
agcagctagc tggagctcat gtgcaactcc tgattctcag gagaaagatg gattttaacc      2040
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tcatgggcca actaagtgtt atccagtaga aaagacagta cactgctttt cttttagtgt      2160
ttgctttttcc tttgctatat gttttgctat ttccttgtgg cttagaatgt aaaattgatt      2220
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aaaaaaaaaa aaaaaaaaaa aggggggggg gc                                     2312

<210> 1118
<211> 1058
<212> DNA
<213> Homo sapiens

<400> 1118
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ttgtagacaa cagataattg ggtcttgttt ttttatccat tcagagccac tctgtgtctt       120
ttgatttgag agtttagtgc gtttccattg ttattaagaa gtaaggatat gttctgccat       180
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aacctattat tttaagctga taaccactta acattgcata ggcaaaaaca cacagaggca       420
aaaagaaaac caataaaagc tctacacttt agcctcttgc tttttaactt tttgttgtct       480
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gttcatcttt tagtctttct ccttaagatc agagtatttt atatatcaca tttacagtgt       600
tataatatgc tgcattttt tgtgtactta ctattaccag tgagttttgg accttcagtt       660
gatttcttat tactcatcaa cttcctttc tttctgattg aaaaactccc aggctggaca       720
cggtggccca tgcctgtaat cccagcacty tgggaggctg aggtgggctg atcccttgag       780
gtcaggagtt cgagaccatc ctggaaaatg tggcaaagct ccatctgtwc taaaaatata       840
aaaaattagt tgggtgttgt ggcgagcacc tgtaatccca gctacctgtg aggctgaggc       900
aggagatcgc ttgaacccgg gagacgaagg ttgcagtgag ccgagatcgc accgctgtac       960
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gggcggcc                              1058

<210> 1119
<211> 2732
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654

<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (334)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1885)
<223> n equals a,t,g, or c

<400> 1119
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caacacaggt ctgggaggga tccctgtagc aggtattcca gcgtcttcag gaaacagttt   180
agactctctt caagatgaca atcctccaca ctggctaaaa tcccttcagg ccctcacaga   240
gatggacggc cccagcgctg ctccatcaca gacccaccac agcgcccct tcagcrcaca   300
gatcccgctg cacagagcca gttggaatcc ctancctcct ccttcaaacc cttccagctt   360
ccactcccca cccccaggct ttcaracggc cttcagaccc cccagcaaaa cccccacaga   420
tttactacag agttcaacac tggaccgcca ttaggcawag aggagcaacc attakaaaat   480
gcaggatttg tcccactctk ttttctccct ctcagcccac cacccacagc tcccttctca   540
tctcttatgt tctgaagaat ccagtacctg atcaattttt tttctcccta accccagatg   600
caatgcgatc acagggtcat taccatctct ttattaattg taaaaatttt tgttgatcca   660
gcatttgagt gacactgttg aatgtttcta aaaatgcctt tttaaggaga gaaaaaaaaa   720
tcaaagggca gtctcaatac ttagaaaatt attgtttgtc tgttgcgcat aataatgaca   780
taatctgctt agcagaaaat gacgattaat ctataggaaa gctcaagtaa atgcattatc   840
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cgattgctaa agagttcata aggaggtgag aagtaatttt tttaaaggag aaaaattttt   1140
tggctttaga tttaaagtaa attgaaatgt tttaaagaaa aaagtattca cagatttaat   1200
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gaatctttttt tgttttacca taaattcacc tgacgagggc actctgagat agcactgctc   1320
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taaccctgta gtttctggac gtttgtgcag tattgaaaag acaggagaaa agaaaacaga   1440
aacctggtta taacctgacg ctaaaactaa aaacaaggaa atgtacctct ttcttcagaa   1500
ttaaaactaa aatcttaaat aaaacagaaa acttgatgat gacacttggg ttgtccttgt   1560
ttttgttttt ctgttttgtt ggatgtgagt ttgaaaggtt ttgtgacaag tagccatcag   1620
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tgtactttaa tttgttaaaa tttcaacaca atttttagaa acttaaacat gatattctca   2340
aataaatgtc accagaaata gatggtgatc aagtggatag taaattgttt tgtaaaactw   2400
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taatattcag atggcagtga attgtaatca aggctttttg cggggatgcg gggaagtcct   2580
gakatggggc atatcaataa aaatgttgct tttttgtaa aaggagggaa ctcctacctt   2640
ataaggctgt gctgtaattg tgtgtgtgtt taatcagtca tacagaagag tttataaaaa   2700
gcatgacttt ataaaaagta tgaagaataa aa   2732

<210> 1120
<211> 372
<212> DNA
<213> Homo sapiens

<400> 1120
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tggcaatgca tttccatact cttttaacttg gggactgaaa tgttataaat tgacagttct   120
actcagaaga ccttttcaagc atcttgtgtt tatgagaata caggggcatc tgcggaatga   180
attcgaacac atggatgaat taaatttgaa aacacacaga ccgagaggca gacagttcct   240
aggctgtggt cgttgcatgg attttacaaa actgttaacc tacacctttg gctttgctgt   300
gttcattgtc ctggggaaga attgtgggtt taagaattac tctttgatta aactacttaa   360
aaaaaaaaaa aa   372

<210> 1121
<211> 2043
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (308)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1672)
<223> n equals a,t,g, or c

<400> 1121
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cctgcctcat ggttagaatg tatgttcatt ggggattctg catacatttt catcacatat   120
ctacttttct ggcttttaag taatatcctc tcctttgttt ttgccaacag tgttcatgaa   180
tagtgaatgt aggaaagcat tatcattgct atgtttt att ttcacactgt atctcagtat   240
cagcccatac tttcaatgta ctaacaactg tcactgaggc aaaaagtttt aattaagctc   300
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caggctcctt ccatcttgtg gctgccccat ccactaagtt ctcagactct ttcatttcca   720
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tcacctaraa gtggcacata tcactttta t tgacgtttca ttagcaagaa ttgtcctgca   840
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aataagggtg agaataatag aaggtgagat cggagaggca atcgtcaggc cagactgtgt 1500
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gtaactaact ttattgaact atgattttca taaaatatac ccattcggta ggttttaaaa 1620
atgtagactg aagacattca tataatcacc actacaataa aaatatagaa cnttttatc   1680
atccctaaa gtatccctat ttatagttca tacctggccc cagcaatcac tgatatgcca 1740
tcacagatta gtttgttttt tctaggattt catacaaatg gaaaggaaca gtatgtactc 1800
ttctgtgtct gtattctgtc actcaacata atgctttga gattcattca tattgttgtc 1860

656

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agtatcacta ctttatttct atttactgcc attatatgaa ttctattatg tggatatacc    1920
ataatttatt taatctttca cctactgaga ggcatttgag ttgttgataa tttggggctg    1980
ctatgaataa atctgctatg aacataaaaa aaaaaaaaaa aaaaaaaaaa aaaaagggcg    2040
gcc                                                                 2043
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<210> 1122
<211> 1557
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1557)
<223> n equals a,t,g, or c
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<400> 1122
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gggagtttat gaagcaaagg caaaggcaac acgtcggcta gcttcaggrt agcaccgtga    180
gaaatgggct gtattgatac tgtgaatgtt tgttttccaa gctgttttat acaggtttgt    240
tttttcatgg tgtagggtat ttatgacaaa gtaaatgttg tgaaggttaa agataaatta    300
agattatcca ccaaatgcta aaaatactga tgtgtaaatc acctttatcg cctcacctct    360
tctacaagct tttgtggctt gagggctttt gtttttggct tttgtctgga tgaaagtttt    420
gcccagttgt gttttaaaaa caattcctca tgaacactaa gattaattgt gtctgtatct    480
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gttatgtgtg tttgcacaca cgcgtgtgtt attgtagcaa taacaaaaag tagccatctc    660
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ttcaagtctg agttcaaaac cagccctgat cccttatgac caactgctac tcgaccagtc    780
gccactcagt ggccacctgg tgcccgttta gattttttgct tgggtttttac tggccacctc    840
tatagacgag agttgcaaag ttgctttgag cagagaggga aagattaatt tacactgctg    900
gccaccgaag caggtgtttc ctgggtagta atctcacggc tcttgatctg gaaacttcag    960
agtacaaatt ggtggatggt ggaaggcagg acacgtatct ctgtctgacg gaaaacagac   1020
ctcggggctg gcgtaaaccc tgctgccagg ccctctcccc actgccccaa accggcctag   1080
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tcagttagca gctgggcagc agcgcaccat tcatcattta ggcttgtggt ttgttgttta   1260
ctctaccaat gttatgtyga aactgcattg taaaaagaga agaaaatggc aggttttcca   1320
ggtccacgga aaggtttggc ctgacgctgg agtgcggtga tgaacttacg tgacaatgat   1380
tgtattcctc agtagcactt taaacgccga agacagccct gcagcaagcc tgcacacggg   1440
cttgggtggg ttcctttgga gaagatgtgg ctggaacaca aacaatcttt gaaagaaata   1500
aatgtgcaca cagaacamwa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaatn      1557
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<210> 1123
<211> 1699
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (26)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (28)
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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (56)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (62)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1239)
<223> n equals a,t,g, or c

<400> 1123
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anggactcac tataggaaag ctggtacgcc tgcaggtacc ggtccggaat tcccgggtcg   120
gacccacgcg tccggcgagg ctgggttacg tgaggaagct gggggtttcg cgggcagctt   180
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ttaaaagtca caaaacccag acaaaggagg ctcaggaagc agaggctttt gcattgtacc   600
acaaggccct tgatctgcag aaacatgacc ggtttgagga gtctgccaaa gcctaccatg   660
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cccagcggga ggatctggag acagccatgg agttctactt agaggcagtg atgctggact   840
ccacagatgt caacctctgg tataagattg gacatgtggc cctgaggctc atccggatcc   900
ccctggctcg ccatgctttt gaggaagggc tgcggtgcaa tcctgaccac tggccctgtt   960
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cctacacctc tgtggctaca accagcttcc cactgcacag tcctggtctg ttggagacag   1560
gcgctcctgt gggtgatatt tctgggggag ataaatccaa gaaaggggta aaacggaaga   1620
agatttcaga agagagtgga gaaacagcaa agcggcggtc tgcccgtgtc cgaaacacca   1680
agtgcaaaaa aaaaaaaaa   1699

<210> 1124
<211> 1796
<212> DNA
<213> Homo sapiens

<400> 1124
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cgctgggaaa tggatggctg cactatactg tgtgatgtta ttgctatgtt catgccatcc   180
cctctgcctg gaatgccctt ctgcatgaat gcctgtgaaa tgttgttgct cctttgtatg   240
gcctggcttc cgtggttggc aggaatctct tctttcgtgg tattcctgtc atctttgtgc   300
atcacagtca gctttgtatt cctagcttgt aagctacttg aggataaggg catgtctgaa   360
tctatttaat ctctttgcac ctgtttgggc aattgatgtt ttaaatattt aaataactaa   420

658

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actctctcta cagtacatac tcacttttga tttatgaatt ggcaaaattc aactttttc     480
cttgaatatt cttaaactga gatgaattcc aaaggagagt gttctgtgtg tggccttcat     540
tgagtggttt tctgttacca gaaagctctt ggtggccttc ctcttccctg gtgtcaaggt     600
tgactgttat aggaaatggg aggggagagg gccgtttctg ccacgcattg tcctaggttc     660
ttaacattat ttaatcctta taatgcaatg tatcctcatt ttacagatga aacctgagac     720
caaagaacat gtaacacata aagtacattg cagagttagg atgtgaaccc aactctgatt     780
ctaaacctaa tgctctcact ctttcattca gaggttcagt cagttctttg taggctgtag     840
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cccagcattt tgggaggccg aggcaggcgg atcattaggt caaaagattg agaccatcct    1020
gaccaacatg gtgaaacccc gtctctacta aaagtacaaa aattagctgg gtgtggtggc    1080
gcatgcctct agtcccagct acctgggagg ctgaggcagg agaattgctt gaacccagga    1140
ggcagaggtt gcagtgagcc aagatcatgc tactgcacta cagcctggca acaaagcgag    1200
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cattatggag acatcactag tttgaaagaa tccaacttca tcaaatatta acgtaccgag    1560
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gccctatttt tggttgttgt gatgccatta catctgtata tctggccata tcagctgcta    1680
atggtgagtt cttgcaaaca aaatgatttg ataaacaacc taccatactt tatacaaatc    1740
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<210> 1125
<211> 1535
<212> DNA
<213> Homo sapiens

<400> 1125
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ttagggataa ctcatactct tggtgacaag aaatgttaat ggtgtcctga aaccttttgg     180
tcagtgattg ctccattatg tgggaaaaac ataggaaaat aaacatagga aaaacaaagg     240
aaaataaaag actcatagta cttcaataaa agttgtcacc aaatcccaag aaaatgattg     300
cattggaagg aatattcttt ttgttttaat tgatagtatt ttaggaagta gctaacactt     360
gttcttattt cctagcttaa aaagtgaata tatgcacaca catatataac tagaaagtga     420
tatattaaca ttttctatta acaagttttt tatctcataa aagatattct ttggctttcg     480
aagagaagcc aaaataaata tcacataggc atttcagata tcccttcctt taaatgttta     540
tagtgataca taaaatagaa attgcaaata tttgatattt taatattatt tttgctttac     600
aatagcattt ttagtgctcc atttttaatt tattttatct ctccaggtta ataatctatc     660
ataatgtcca aattacacag tattgtattg gtcagcttta agtgcccaga tcaatgacac     720
tgaacctggc aaatgcaatg cacatgcaca acgcctagct tctaacatca tggctgttga     780
aactgtctcc tctccaaagc attttcccag ccccatctct gccatttggg tctcatctga     840
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gattctaaac gtcaaatggt aaaggataac attagattat ttcgctttta ttttgacaga     960
gttcaaatag caaaataaat tagatatact gtcacagctt aagaaattta aaatgaaata    1020
tgttgtagtc aggtggaagt ttctgccggg gaaatattaa cacctaattt cccagaatac    1080
ttatttcatg cattgcaaat atctatctcc tgtcatgaca ctgagatgaa aaggatcggt    1140
taaaagtttg ctaactgaac tatttcccac agtgtaaata actaagtgtt ggtatagact    1200
agtatggaaa catactaatt acactgggtg taagctatgt gagttgcctt atcttttcac    1260
ataacattta tatgtattgc atttcccata tcgtttcctt ttgtttttgct gataacaact    1320
aatgaggaaa agaaggaag cattaaaaaa aaagaaaaa aaagtcttcc aacaaaactg     1380
ctagagagag aaagccaact attataaaat ataagcacaa ttctattgaa atatcagctc    1440
cagattcaag taattttggg catgtgtatt atgtgccagg agatttcact tacatatgtt    1500
atggaacgca gtgatttaaa aaacaaaaca aaaa                                1535
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<210> 1126
<211> 1328
<212> DNA
<213> Homo sapiens

659

<400> 1126

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ttccgtgttg gggggctgcg aggcctgggc agcaaaccgc cttgtactgc ctctggcctg   180
tggatagtag atgctcaata aacctctcct tcctgtcaga aactcagtct ccctatgtgg   240
atgacagcat tttcctaaag gatctaaagt tccatccacc ttaaactctg cctgaaggga   300
agactatgaa actagaaaag aaaatggtgt ggatttgtgt gctactgcag acactgctgc   360
gacatatatt aaggagcatg gaacggaacc gcgtggatga taaagtctgc gtggtgttta   420
caaaggaata ttcataagca ctttctgaga agccccgtgc agctgctaac agtgactgcc   480
taggggaaaa tggacttgaa ggagtagagg ccaacttttc attttatacc tttctatact   540
ttttaggact accacctatg tacgtgcatt ttattttgt taaatgttcg caggggatat   600
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ccaggtggtg gttactcaga tgtatttttat ccttcaatga gaagtttatt cgaaaacgt   720
cctgtgtctc ttccaaagat agctccagct gggcaaagtg gcagctctgt gggctccaac   780
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gtctctagct gtgtgatcct ggacgtgcct ctctgcttcc tcagctcctg cttcaagaca   900
ggcctaacca aattttgaga agtccccagc agagctcccg accctaatca gagaagaaga   960
atgaatgttc tgagtgggta ccacatggca ggtgctattc taaatactga acagctgtga  1020
acccatttaa tccccgtaag aaactggtga gcttggtttc atttgactca agaggcccag  1080
agacgaaagc aactggtcca gggtcacaca gccagcagga agtggatcag ggttggaacc  1140
tgggcagtct ggccctgaag cgctgcagaa agtattattt tgggagcaaa taggtaatag  1200
gtggtgagag ccacctaaaa atacccctcc tctctggccc agtaaccact tctagaaatc  1260
tgccctaaac aagtaactca aataaagcga aagctgagat aaaaaaaaaa aaaaaaaaa   1320
aactcgag                                                          1328
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<210> 1127
<211> 1232
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1227)
<223> n equals a,t,g, or c

<400> 1127

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caacggtttg gagcagcaca tgtttgggaa aatggggcta gaagtaatgt tacagtgagg   180
aatacaaacc aaagattaga gccaataaga ttacgatcta cttccaatag tcgaagccgt   240
tcaccaattc agagacagag tggcactgtt tatcataatt cccaaaggga aagtagacca   300
gtacagcaaa ccactagaag atctgttagg aggagaggta gaactcgagt cttttttagag  360
caagatagag aacgagaacg cagaggtact gcatataccc cattctctaa ttcaaggctt   420
gtgtcaagaa taacagtaga agaaggagaa gaatccagca gatcctcaac tgctgtacga   480
cgacatccaa caatcacact ggaccttcaa gtgagaagga tccgtcctgg agaaaataga   540
gatcgggata gtattgcaaa tagaactcga tccagagtag ggctagcaga aaatacagtc   600
actattgaaa gcaatagtgg gggctttcgc cgaaccattt ctcgtttaga gcggtcaggt   660
attcgaacct atgttagtac cataacagtt cctcttcgta ggatttctga gaatgagctt   720
gttgagccat catcagtggc tcttcggtca atttttaaggc agatcatgac tgggtttgga   780
gaactgagtt ctctaatgga ggccgattct gagtcagaac ttcaaagaaa tggccagcat   840
ttaccagaca tgcactcaga actgagtaac ttaggtacag ataacaacag gagccagcac   900
agggaaggtt cctctcaaga caggcaggcc caaggagaca gcactgaaat gcatggtgaa   960
aacgagacca cccagcctca tactcgaaac agtgacagta ggggtggcag gcagttgcga  1020
aatccaaaca atttagttga aactggaaca ctacccattc ttcgccttgc tcacttttt   1080
ttactaaatg aaagtgatga tgatgatcga atacgtggtt taaccaaaga gcagattgac  1140
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aatctttcca ccaggcacta tgagcataac agtattgata gtgaactagg taaaatctgt      1200
agtgtttcts gkgccgaatt ctggaanccc gg                                    1232


<210> 1128
<211> 557
<212> DNA
<213> Homo sapiens


<400> 1128
gaattcggca cgaggaggac tggagagaca tggcagatgc tacctgcaca cttttggtaa        60
tattctgtgt gatgggatat gaaatggtcc atagaaaaaa accggaaaaa tacgccaagg       120
ttaggttcat tctaagagtc taaaaatttc aaaaaccaaa acaacattat aaatggtgtt       180
tctcaaggac ctttcactac cttttttagat tgtgcttgtg attttcaggc aagctaaatg      240
tctgatgaag actgctcttc ttttgttctg tgtctgacct actaattcct gcccatgctt       300
caaactcagt tcagaaatca ctgaaggaac catccactgc cggcctgcct gcaaccacag       360
ctgacagctg agttagttag gttttcctgt ccctattatt taccagtttg tactgaaatg       420
cttttcatggg ctgtgcttcc agattatgag ttctgtggaa tcaggaagta tgtctctgta     480
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aaaaaaaaaa actcgag                                                      557


<210> 1129
<211> 1320
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (3)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (52)
<223> n equals a,t,g, or c


<400> 1129
ncnaaattaa ccctcactaa agggaacaaa agctggagct ccaccgcggt gncgtccgct        60
ctagaactag tggatccccc gggctgcagg aattcggcac gaggcacctt cttcaagatg       120
gagcttttg aaggcatgcg agagagcacc aagatttcat ctctgttggc agaattggag        180
gcaattcaaa gaaattcagc atcccaaaag agtgtcattg tctctcagtg gaccaacatg       240
ctgaaagttg tagcattgca cctgaagaag catggactga cttatgccac catcgatggc       300
tctgtcaatc ccaagcagag aatggacttg gtagaggcat ttaaccactc cagaggccct       360
caggtaatgc taatctctct cttggccgga gtgttggtct aaacctgact ggaggaaatc       420
acctctttct tttggacatg cactggaatc catcacttga agatcaagct tgtgaccgaa       480
tttaccgagt agggcagcag aaagatgttg tcatacacag rtttgtttgt gagggaacag       540
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gcagttctct cagtgcaggc agttcttcct ctcaggctga agatcaagga gatgctttgt       840
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gtatttgtat cactgtacca tttagtgttg tatatcactc agtcatttaa tattggttat       960
caccatacag tttaatattt gtatcatttg gttcattgta tcgtttagta tttctattat      1020
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ttacaaattt gcagtatttg tagcatttag tatcattgtt tcatttagta tttggtacaa      1140
tctaataaat actaatccag tccaatacta atccaatcca atactaataa tactattggt      1200
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661

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acaatccaat actaataata ctattggtac aatccaatac taataatact aacagtagta    1260
ttgatacaat ctaataaata atgtgtttga cagtgaaaaa aaaaaaaaaa aaaaactcga    1320
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<210> 1130
<211> 1271
<212> DNA
<213> Homo sapiens

<400> 1130
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cggtccccag atacaaacat gtggagcaga atggtgagaa gtttgtggta tataatgttt     180
acatggcagg gaggcagctg tgttctaagc ggtaccggga gtttgctatc ctacaccaga     240
acctgaagag agagtttgcc aactttacat ttcctcgact cccagggaag tggccatttt     300
cattatcaga acaacaatta gatgcccgac gtcggggatt ggaagaatat ctagaaaaag     360
tgtgttcaat acgagtaatt ggtgagagtg acatcatgca ggaattccta tcagaatccg     420
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aaaaaaaaaa a                                                         1271
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<210> 1131
<211> 2455
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1769)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2433)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2434)
<223> n equals a,t,g, or c

<400> 1131
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gctctcttct agagccgagg gacccggtgg cctcgtcgct cagcccctat ttcggcacca     180
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cgctggccga ctggcctttg tggtacgcgg actggatgga cgggcagcta gtagaraagg     480
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aactgtttca ttttatgaag atctgaagaa ccactacaag gacatccttc agagttgtca     1440
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tgaagaacat ttttaattct ttaggaatct gcaatgagtg attacatgct tgtaataggt     1560
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tcataataac acttgaaaag tgctggagta acaaaatatc tcagttggac catccttaac     1860
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<210> 1132
<211> 587
<212> DNA
<213> Homo sapiens

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<210> 1133
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<212> DNA
<213> Homo sapiens

<400> 1133
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<211> 2777
<212> DNA
<213> Homo sapiens


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664

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<211> 603
<212> DNA
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<210> 1136
<211> 403
<212> DNA
<213> Homo sapiens


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<210> 1137
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<212> DNA
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<220>
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665

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666

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<212> DNA
<213> Homo sapiens

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667

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668

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<212> DNA
<213> Homo sapiens

<400> 1140

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669

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<211> 658
<212> DNA
<213> Homo sapiens


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<210> 1142
<211> 633
<212> DNA
<213> Homo sapiens


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cttcttcctt ctgctcttgg cacctaacac agtgccttgc acacaaacaa taaatgattg    540
ttgagtgaat aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    600
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa                               633


<210> 1143
<211> 275
<212> DNA
<213> Homo sapiens


<400> 1143
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cttgtgtggg tcgagagcgc cctcatggtg ctggtgctgt tgtgtgtagg tcccctgggg    180
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670

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<211> 1439
<212> DNA
<213> Homo sapiens
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<210> 1145
<211> 1020
<212> DNA
<213> Homo sapiens
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<210> 1146
<211> 1076
<212> DNA
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671

<213> Homo sapiens

<400> 1146

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<210> 1147
<211> 1109
<212> DNA
<213> Homo sapiens

<400> 1147

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atttttgtc atcctgagat acttctaatt tcattgtata taggtggttt tccctggaat   1020
tcattaattg tttgctttgg acatgtggaa agagccttac taataaaatt gatttttactt   1080
atgaaaaaaa aaaaaaaaaa aaaaaaaaa                                      1109
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<210> 1148
<211> 1963
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> n equals a,t,g, or c

<400> 1148

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atncaagctc taatacgact cactataggg gggggagcgc aagcgaggca gccatgtctt     60
atcccgctga tgattatgag tctgaggcgg cttatgaccc ctacgcttat cccagcgact    120
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672

```
atgatatgca cacaggagat ccaaagcagg accttgctta tgaacgtcag tatgaacagc    180
aaacctatca ggtgatccct gaggtgatca aaaacttcat ccagtatttc cacaaaactg    240
tctcagattt gattgaccag aaagtgtatg agctacaggc cagtcgtgtc tccagtgatg    300
tcattgacca gaaggtgtat gagatccagg acatctatga gaacagctgg accaagctga    360
ctgaaagatt cttcaagaat acaccttggc ccgaggctga agccattgct ccacaggttg    420
gcaatgatgc tgtcttcctg attttataca aagaattata ctacaggcac atatatgcca    480
aagtcagtgg gggaccttcc ttggagcaga ggtttgaatc ctattacaac tactgcaatc    540
tcttcaacta cattcttaat gccgatggtc ctgctcccct tgaactaccc aaccagtggc    600
tctgggatat tatcgatgag ttcatctacc agtttcagtc attcagtcag taccgctgta    660
agactgccaa gaagtcagag gaggagattg actttcttcg ttccaatccc aaaatctgga    720
atgttcatag tgtcctcaat gtccttcatt ccctggtaga caaatccaac atcaaccgac    780
agttggaggt atacacaagc ggaggtgacc ctgagagtgt ggctggggag tatgggcggc    840
actccctcta caaaatgctt ggttacttca gcctggtcgg gcttctccgc ctgcactccc    900
tgttaggaga ttactaccag gccatcaagg tgctggagaa catcgaactg aacaagaaga    960
gtatgtattc ccgtgtgcca gagtgccagg tcaccacata ctattatgtt gggtttgcat   1020
atttgatgat gcgtcgttac caggatgcca tccgggtctt cgccaacatc ctcctctaca   1080
tccagaggac caagagcatg ttccagagga ccacgtacaa gtatgagatg attaacaagc   1140
agaatgagca gatgcatgcg ctgctggcca ttgccctcac gatgtacccc atgcgtatyg   1200
atgagagcat tcacctccag ctgcgggaga aatatgggga caagatgttg cgcatgcaga   1260
aaggtgaccc acaagtctat gaagaacttt tcagttactc ctgccccaag ttcctgtcgc   1320
ctgtagtgcc caactatgat aatgtgcacc ccaactacca caaagagccc ttcctgcagc   1380
agctgaaggt gttttctgat gaagtacagc agcaggccca gctttcaacc atccgcagct   1440
tcctgaagct ctacaccacc atgcctgtgg ccaagctggc tggcttcctg gacctcacag   1500
agcaggagtt ccggatccag cttcttgtct tcaaacacaa gatgaagaac ctcgtgtgga   1560
ccagcggtat ctcagccctg gatggtgaat ttcagtcagc ctcagaggtt gacttctaca   1620
ttgataagga catgatccac atcgcggaca ccaaggtcgc caggcgttat ggggatttct   1680
tcatccgtca gatccacaaa tttgaggagc ttaatcgaac cctgaagaag atgggacaga   1740
gaccttgatg atattcacac acattcagga acctgttttg atgtattata ggcaggaagt   1800
gtttttgcta ccgtgaaacc tttacctaga tcagccatca gcctgtcaac tcagttaaca   1860
agttaaggac cgaagtgttt caagtggatc tcagtaaagg atctttggag ccagaaaaaa   1920
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa                      1963

<210> 1149
<211> 808
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (794)
<223> n equals a,t,g, or c

<400> 1149
gaattcggca cgagaaaaga cctcatttat aataaggtca ctccaacatt tcaccactgg     60
aagattgatg acaagaagtt tggtcttacg tttcaaagtc ctgctgatgc tagggctttt    120
gatagaggta tccgaagagc tatagaggat atttctcaag gatgccccga atcaaaaaat    180
gaagctgaag gggcagatga cttacaagca aatgaagagg attcttccag ttctctagtg    240
aaggatcacc tttttcagca agagacagtt gttaccagtg agccttatag aagctcaaat    300
ataagacctt ctccctttga agatctgaat gccagaagag tctacatgca aagccaagcc    360
aatcagataa catttggtca gccaggcttg gacattcaga gcagaagtat ggaatacgta    420
cagcggcaaa tatccaagga atgtggaagc ctaaagtccc aaaatagggt ccctttgaaa    480
tcaatcagac atgtcagctt tcaagatgag gatgagattg tcagaataaa ccctcgagat    540
atcttaatac gtcgctatgc agactacaga catcctgaca tgtggaaaaa tgacttggaa    600
agagatgatg ctgattccag tattcagttt tctaaaccag acagtaaaaa atcagactat    660
ctgtactctt gtggggatga gactaagtta agttcaccca aagactctgt ggtatttaag    720
acgcagcctt cctcattaaa aattaagagt caaaacgagg aaaagaggat ggtgaacgtt    780
ctcgttgcgt atanggccag gaaagttt                                       808

<210> 1150
<211> 1036
<212> DNA
```

673

<213> Homo sapiens

<400> 1150
ggcacgaggc ggcttctacg ctccggcact ctgagttcat cagcaaacgc cctggcgtct   60
gtcctcacca tgcctagcct ttgggaccgc ttctcgtcgt cgtccacctt ccagctgacc   120
ctcgtgctgc gcctggactc acgactctgg cccaagatcc aggggctgtt tagctccgcc   180
aactctccct tcctccctgg cttcagccag tccctgacgc tgagcactgg cttccgagtc   240
atcaagaaga agctgtacag ctcggaacag ctgctcattg aggagtgttg aacttcaacc   300
tgaggggggcc gacagtgccc tccaagacag agacgactga acttttgggg tggagactag   360
aggcaggagc tgagggactg attcctgtgg ttggaaaact gaggcagcca cctaaggtgg   420
aggtggggga atagtgtttc ccaggaagct cattgagttg tgtgcgggtg gctgtgcatt   480
ggggacacat acccctcagt actgtagcat gaaacaaagg cttaggggcc aacaaggctt   540
ccagctggat gtatgtgtag catgtacctt attattttttg ttactgacag ttaacagtgg   600
tgtgacatcc agagagcagc tgggctgctc ccgccccagc ccggcccagg gtgaaggaag   660
aggcacgtgc tcctcagagc agccggaggg aggggggagg tcggaggtcg tggaggtggt   720
ttgtgtatca cttgggatct ttgacacttg aaaaattaca cctggcagct gcgtttaagc   780
cttcccccat cgtgtactgc agagttgagc tggcagggga ggggctgaga gggtggggggc   840
tggaacccct ccccgggagg agtgccatct gggtcttcca tctagaactg tttacatgaa   900
gataagatac tcactgttca tgaatacact tgatgttcaa gtattaagac ctatgcaata   960
tttttttactt ttctaataaa catgtttgtt aaaacaaaaa aaaaaaaaaa aaaaaaaaa   1020
aaaaaaaaaa aaaaaa   1036

<210> 1151
<211> 938
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (28)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (41)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (43)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (48)
<223> n equals a,t,g, or c

<400> 1151
ttnaaggggga gggggactaa tgtaatgnca ctgccctata ntnaggtncg cctgcaggta   60
ccggtccgga attcccgggt cgacccacgc gtccgagaaa ctgcgcaact gcagttcgcc   120
tggcctgcct agcaggcgag ctccgttgca cgctgagcga tgactgcatt ccactcacgt   180
ggcgctgcga cggccaccca gactgtcccg actccagcga cgagctcggc tgtggaacca   240
atgagatcct cccggaaggg gatgccacaa ccatggggcc ccctgtgacc ctggagagtg   300
tcacctctct caggaatgcc acaaccatgg gcccctgt gaccctggag agtgtcccct   360
ctgtcgggaa tgccacatcc tcctctgccg gagaccagtc tggaagccca actgcctatg   420
gggttattgc agctgctgcg gtgctcagtg caagcctggt caccgccacc ctcctccttt   480

                                  674

```
tgtcctggct ccgagcccag gagcgcctcc gcccactggg gttactggtg gccatgaagg    540
agtccctgct gctgtcagaa cagaagacct cgctgccctg aggacaagca cttgccacca    600
ccgtcactca gccctgggcg tagccggaca ggaggagagc agtgatgcgg atgggtaccc    660
gggcacacca gccctcagag acctgagctc ttctggccac gtggaacctc gaacccgagc    720
tcctgcagaa gtggccctgg agattgaggg tccctggaca ctccctatgg agatccgggg    780
agctaggatg gggaacctgc cacagccaga actgagggggc tggccccagg cagctcccag    840
ggggtagaac ggccctgtgc ttaagacact cctgctgccc cgtctgaggg tggcgattaa    900
agttgcttca catcctcaaa aaaaaaaaaa aaaaaaaa                             938

<210> 1152
<211> 902
<212> DNA
<213> Homo sapiens

<400> 1152
ggcacgagct gacacactag tggcctcgag tcactgatag tggtgcctcc tccttacctt    60
ggcaagccct tgtagccctc tgagccctca tcctgcaggc agagcccctc agtgctctga    120
gaaacctgcc ctgaactcac cgcctcccct gcctgggcac tccctcctcc ctgcgcccac    180
agcccccatg ccaatctccg tcagctcttt ctgtgctgct gtaattgttg gtttgcctgt    240
ctcctttgag ctgtgggcat tgccggggta gggtggtgtc ttcaccacag ctccagaagg    300
cactggtggg atgtggagtc aggagcaacc agagacccccc caatactaga atgggtttga    360
gcttgggggtg gggtggatgg ggaagactta ctctgaatgt tcgttcacca tccgtgggca    420
ccaggtctgt gccaagcaca gggactccag gggcagctgc cattcgttcc agtgatgtat    480
ttgggggcctt ctcaggtgag gaagccaagg tggccaaggc cctcggtccc ctgccctgat    540
agggcttacc tgtgggtggg ggagggagac cacacatgtc agaggtagtg aaggccgctc    600
caaatagtga ctggggccag gcaggcggaa aagagaacag aagagaatcc agaagtgttc    660
agacagaact agggacaaca gaggggcctc catggtggca tgggtcagca gagcatggag    720
caggcagagg aagcctatct gtggggctgg gtacatttct ctgagactca cggaatgtaa    780
gtgttgaggt ttctgcaaag agggcgcagg cctgcagtga cggttcagat attgataacc    840
catccccctt ggcaggtggg ggcttaggca tccatattgg attcaaaaaa aaaaaaaaaa    900
aa                                                                   902

<210> 1153
<211> 1044
<212> DNA
<213> Homo sapiens

<400> 1153
cgggattcgc acgagagraa agcacattgt catctttaat cctttccatt tatttgcctc    60
ttgatagatg acctttatat ttttgctttt tgacaatttc tacctgaggc atgatgtaac    120
taaaatttct aacatgatag tggtagttct ctggattaat ttatgctcat ggttttgctt    180
tgtttctccc ttaccaaaat gctcttttca gtattacaca agaaaaagat catgatttgc    240
atcatgatgt acatagcaaa tttcatgtat gatcgtgttt cctgttccat cacatttctg    300
gcatttttttt taacccactg ggacattagg atgtcataac ataattggat gttagacata    360
ggttgagaaa tcaagggtag tggtagatgg aggctgacag acaccttcca gatccacttt    420
agaggtactg agtattccta aaccagttat gtaatttgca tgtggtcata tagctagttg    480
gtggccaaat cagggataca acatgtatgt gagtatcatt ctatcatcta tctatctact    540
tattgacaga taagaatata cttgctttgt gtaaatgatt accctttgat tttgtggttg    600
tcacaaacac atgaaactat tcatggatgg acctacctgt ctgatgatgg tggtagtgat    660
gatgatgatg atgttatcct aggatataac cactattctt taacccttga aactgaggtg    720
cataaggtac aataattcgc ccaagctcac atagataaca agtttgcagg gctagaaatc    780
ttactgagtt tcatctgaaa tgcagacttt cagagagaga gagagaggat gcttagtgtg    840
ccatatctta cgtctaacaa tggctaatga atctttaaag agaggactac tccctagaca    900
tgagcgtgtt aggactctgt tcccatttct acacatttat gcttatatga gggccattga    960
ttggccaatt ttagcatttc tttgtactcg tgggatgata tttaaaaata caaaaaaaaa   1020
aaaaaaaaaa aaaaaaaaac tcga                                          1044

<210> 1154
<211> 1417
<212> DNA
<213> Homo sapiens
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675

<220>
<221> SITE
<222> (551)
<223> n equals a,t,g, or c

<400> 1154
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tggaggtgtt atcatttata tcatgaagca ctcgttgagc gtgggggagg tgatcgaagt    120
cctggaagtc cttctgatct tcgtttatct caacatgatc ctgctgtacc tgctgccccg    180
ctgcttcacc cctggtgagg cactgctggt attgggtggc attagctttg tcctcaacca    240
gctcatcaag cgctctctga cactggtgga aagtcagggg gacccagtgg acttcttcct    300
gctggtggtg gtagtaggga tggtactcat gggcattttc ttcagcactc tgtttgtctt    360
catggactca ggcacctggg cctcctccat cttcttccac ctcatgacct gtgtgctgag    420
ccttggtgtg gtcctaccct ggctgcaccg gstcatccgc agaatccctg ctctggctt    480
cttcagtttc tcttccagac agacacccgc atctacctcc tagcctattg gtctctgctg    540
gccaccttgg nctgcctggt ggtgctgtac cagaatgcca agcggtcatc ttccgagtcc    600
aagaagcacc aggcccccac catcgcccga aagtatttcc acctcattgt ggtagccacc    660
tacatcccag gtatcatctt tgaccggcca ctgctctatg tagccgccac tgtatgcctg    720
gcggtcttca tcttcctgga gtatgtgcgc tacttccgca tcaagccttt gggtcacact    780
ytacggagct tcctgtccct ttttctggat gaacgágaca gtggaccact cattctgaca    840
cacatctacc tgctcctggg catgtctctt cccatctggc tgatccccag accctgcaca    900
cagaagggta gcctgggagg agccagggcc ctcgtccct atgccggtgt cctggctgtg    960
ggtgtgggtg atactgtggc ctccatcttc ggtagcacca tggggggagat ccgctggcct   1020
ggaaccmaaa agactttga ggggaccatg acatctatat ttgcgcagat catttctgta   1080
gctctgatct taatctttga cagtggagtg gacctaaact acagttatgc ttggatttttg   1140
gggtccatca gcactgtgtc cctcctggaa gcatacacta cacagataga caatctcctt   1200
ctgcctctct acctcctgat attgctgatg gcctagctgt tacagtgcag cagcagtgac   1260
ggaggaaaca gacatgggga gggtgaacag tccccacagc agacagctac ttgggcatga   1320
agagccaagg tgtgaaaagc agatttgatt tttcagttga ttcagattta aaataaaaag   1380
caaagctctc ctaaaaaaaa aaaaaaaaaa aactcga                            1417
```

<210> 1155
<211> 1377
<212> DNA
<213> Homo sapiens

<400> 1155
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ttggcagtcc cctgacaccc taagaccggc atctgtcgat gttatttccc cagcatggcc     60
gaaacagaag ccctgtcgaa gcttcgggaa gacttcagga tgcagaataa atccgtcttt    120
attttgggcg ccacggagaa accggcagag tgctcttaaa ggaaatcctg gagcagggcc    180
tgttttccaa agtcacgctc attggccgga gaagctcacc ttcgacgagg aagcttataa    240
aaatgtgaat caagaagtgg tggactttga aaagttggat gactacgcct ctgcctttca    300
aggtcatgat gttggattct gttgcctggg taccaccaga gggaaagctg gggcggaggg    360
atttgttcgt gttgaccgag attatgtgct gaagtctgca gagctggcaa aagctggagg    420
gtgcaaacat ttcaacttgc tatcctctaa aggagctgat aaatcaagca attttttata    480
tctacaagtt aagggagaag tagaagccaa ggttgaagaa ttaaaatttg atcgttactc    540
tgtatttagg cctggagttc tgttatgtga taggcaagaa tctcgcccag gtgaatggct    600
ggttagaaag ttctttggct ccttaccaga ctcttgggcc agtgggcatt ctgtgcctgt    660
ggtgaccgtg gttagagcaa tgctgaacaa tgtggtgaga ccaagagaca agcagatgga    720
actgctggag aacaaggcca tccatgacct ggggaaagcg catggctctc tcaagccatg    780
accacattgg agaaatggtt tttattgtca accttaacac ccatcaccaa atcggtaatt    840
tcagggtcta aaaaaagtca gcatgtttta actttgttgt tttactatcc tcaggcatcc    900
attccaatca agaaatgatg gtgctctgca tcagtggttc agagcctggt tatacatata    960
gatcactcag ggagctttgg aaaaataaag atttgtcagc cctatctcaa acttgaatca   1020
aaatttctgg ggtgtgggca caataatctg taattttctt tgtttatact tcccctgatg   1080
ccactggttc cgatgccact ggctggggggg cctgctttga aatgcttgtc tgcagagtca   1140
cagcagccat gaaaacctta tgaccgtgca aatgagctct gctctaaaat tgttgacatt   1200
catgtctctg agttacaaaa gtgctaattc actacatgta attgtgtaag taaacattgt   1260
gcctttacta cttctttatg taatagaagt tatataaccta agcttatata atacatgggg   1320
aggattaaat aaaggaataa agatgaatgg acaaaaaaaa aaaaaaaaaa aaaaaaa       1377
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<210> 1156
<211> 905
<212> DNA
<213> Homo sapiens

<400> 1156
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ccacgcgtcc ggggatcagc gctaccaagg cgcacgagtt ctgcccccta cgattggttc      60
ggggacttct cctccttccg tgccctccta gagccggagc tgcggcccga ggaccgtatc     120
cttgtgctag gttgcgggaa cagtgccctg agctacgagc tgttcctcgg aggcttccct     180
aatgtgacca gtgtggacta ctcatcagtc gtggtggctg ccatgcaggc tcgctatgcc     240
catgtgccgc agctgcgctg gggagaccat ggatgtgcgg aagctggact tccccagtgc     300
ttcttttgat gtggtgctcg agaagggcac gctggatgcc ctgctggctg gggaacgaga     360
tccctggacc gtgtccctg aaggtgtcca cactgtggac caagtgttga gtgaggtgag     420
ccgcgtgctt gtccctggag gccggtttat ctcaatgact tctgctgccc cccactttcg     480
gaccagacac tatgcccaag cctattatgg ctggtccctg aggcatgcta cctatggcag     540
cggtttccac ttccatctct acctcatgca caagggcggg aagctcagtg tggcccagct     600
ggctctgggg gcccaaatcc tctcaccccc cagaactccc acctcacctt gcttccttca     660
ggactcagat catgaggact tccttagtgc cattcagctc tgaggccaga gcatggtcct     720
ccacccttcc tgccattctg ccctgggctc ctcaggtagt tggaattcct gacttaggac     780
ttggggttgg gtccaaggtg cttacatccc aggggcctca tgcctaagat agagggtggg     840
agcgaaccca catgaaccaa tacagcccag ctccaactag aaaaaaaaaa aaaaaaaaaa     900
aaaaa                                                                905
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<210> 1157
<211> 1888
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (37)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1475)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1477)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1879)
<223> n equals a,t,g, or c

<400> 1157
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gggggggaaa tttgagggcc cccggcccgt ttagganaaa ttttggggga gttttggaat      60
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ggctggaact actggacaga cccttttgag atgtgcctgt ggtgctgtgg agatgtgtgt     180
agtggtctta gctctttgtt gagcttgtgt gtgtgttgtg tagtcttagc tgtatgctga     240
aattgggcgt gtgttggagg gcttcttagc tctttggtga gattgtattt ctatgtgttt     300
gtatcagctg aatgttgctg gaaataaaac cttggtttgt caaggctcyt ttttgtggga     360
agtaagtagg ggaaaaggtc tttgagggtt cctaggctcc tttgtacaac aggaaaatgc     420
ctcaaagcct tgcttcccag caacctgggg ctggttccca gtgcctggtc ctgccccttc     480
ctggttctta tctcaaggca gagcttctga atttcaggcc ttcattccag agccctcttg     540
tggccaggcc ttcctttgct ggaggaaggt acacagggtg aagctgatgc tgtacttggg     600
ggatctcctt ggcctgttcc accaagtgag agaaggtact tactcttgta cctcctgttc     660
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agccaggtgc attaacagac ctccctacag ctgtaggaac tactgtccca gagctgaggc     720
aaggggattt ctcaggtcat ttggagaaca agtgctttag tagtagttta aagtagtaac     780
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ctgcatgtga atgaacagga atgagccgga cagcctggct gtcattgctt tcttcctccc     900
catttggacc cttctctgcc cttacatttt tgtttctcca tctaccacca tccaccagtc     960
tatttattaa cttagcaaga ggacaagtaa agggccctct tggcttgatt ttgcttcttt    1020
ctttctgtgg aggatatact aagtgcgact ttgccctatc ctatttggaa atccctaaca    1080
gaattgagtt ttctattaag gatccaaaaa gaaaaacaaa atgctaatga agccatcagt    1140
caagggtcac atgccaataa acaataaatt ttccagaaga aatgaaatcc aactagacaa    1200
ataaagtaga gcttatgaaa tggttcagta argatgagtt tgttgttttt tgttttgttt    1260
tgttttgttt ttttaaagac ggagtctcgc tctgtcacyc aggctggagt gcagtggtat    1320
gatcttggct cactgtaacc tccgcctccc gggttcaagc cattctcctg cctcagtctc    1380
ctgagtagct gggattgcgg gtgcgtgcca ccatgcctgg ctaatttttg tgtttttagt    1440
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aaaatgtcaa aactaatttt tataataaat gtttattttc acattgaaaa aaaaaaaaa    1860
tttaaaaact cggggggggnc ccggtacc                                      1888

<210> 1158
<211> 1899
<212> DNA
<213> Homo sapiens

<400> 1158
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cactgtgaca gttctccagg aaggaggagc ttcctacttt tgagtttctc tgtggaaata    1860
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678

<210> 1159
<211> 1987
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (435)
<223> n equals a,t,g, or c

<400> 1159
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catatttcta aattgtgtga gtttccagct gtagcttttg tctttgtcac attttaaaaa     180
ataataagca agacacattg gggacactgg cagcagttgc caggttttag ctgccaccgc     240
ttcagtatga gatatagctg tcccatcttc ccccattcag ggtaggagat atagtgaccc     300
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agatggatgg gaaagtagaa aaacatatgc aaatctcagt gttctcacta tgaccactct     420
gagcagagat ttggnttttg tttccttttg taacaaagtg aaaacaggtg agacaatgtg     480
cccaaaacaa agggaagaag agaaccttct gtgactccta aaatgttcca tgctgcattt     540
ttgtttcatt ttttattttt ccttgctttg tttttaaaca tgaatataat gcttacttca     600
aattgtttag taaaacaaaa taactaaaga aatgtgagct tcccaaggtt tctaaactat     660
cgctgttgta tattctatag cgttccttat tctttgaggg aaactgtgct tgctgtgatc     720
cattttgtct ctagcttcta gttgtgattc ttgtccataa gcaccaaatt tgatgcccat     780
gatttcaaaa ggtcattctt ttatctgaat gaaaatggtg gtactaagac tgtgaaaatt     840
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cttcaagaat ataaaacttg ttacttgagc ttggaatcat gggcttgatt gaattaatta    1680
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ttgtattttg taacttgata tcttacctag gattgggaat ttgggacatg acacgtacta    1860
taaaagtcag tctatgtaca tactgcttat tgatgtgctg tgatatgagg gaatctgaaa    1920
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<210> 1160
<211> 906
<212> DNA
<213> Homo sapiens

<400> 1160
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ggggagccaa agaccaagca tctcagagaa gaggaggaag aaggcgagaa gcacaggaa      180
cttaggctgc ggaactatgt cccggaggat gaggacctga agaagaggag ggtgccccag     240
gccaaaccgg ttgcagtgga ggagaaggtg aaggagcagc tggaggccgc caagcccgag     300
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gagctgatcc gtgaaaggct gaaaggccag gaagacagcc tagcctctgc agtggatgct     480
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<div align="center">679</div>

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aactctgggc gtgcctgtgt ctgcacatgt ggatgtacat atgtctgtat atatgtatat      780
attttgaact ttctaaaaaa aaaatctgga aatagaaaca agtaaacccc tgaaaaaaaa      840
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aaaaaa                                                                 906


<210> 1161
<211> 4597
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (562)
<223> n equals a,t,g, or c


<400> 1161
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catcatggca aagtttcgga gaaggacttg catcattttg gcacttttta ttctatttat      180
tttctctctg atgatgggtt taaaaatgct gagaccaaat acagctactt ttggagctcc      240
ttttggactt gaccttcttc cagaacttca tcaacgaact attcatttgg ggaaaaattt      300
tgatttccaa aagagtgaca gaatcaacag tgaaacaaat accaagaatt taaaaagtgt      360
tgaaatcact atgaaacctt ccaaagcctc tgaacttaac ttggatgaac taccacctct      420
gaacaattat ctacatgtat tttattacag ttggtatgga aatccacaat ttgatggtaa      480
atatatacat tggaatcatc cagtgktaga gcattgggac cctagaatag ccaagaatta      540
tccacaaggg agacacaacc cntccagatg acattggcty cagcttttat cctggaattg      600
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680

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tttgacgaaa agtaatagag aaaatttact tagcatttta gattctagag acatggaaat    2580
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<210> 1162
<211> 558
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (8)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (33)
<223> n equals a,t,g, or c

<400> 1162
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cacgagcctc cataggaacc cagtgactgg ggggtgacgc ctacaccccc agctatttgc   180
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gcctcctatg ggtgtcttac gtctgtccat ccatctgtcc gtggtcagaa gtggggtcag   480
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aaaaaaaagg gcggccgc
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<210> 1163
<211> 1442
<212> DNA
<213> Homo sapiens

<400> 1163
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gcctgctggt ccagagtgtg cgtgtgtatc ggtgtgtgtg tacacttgca tgtgtgtgtg   180
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cc
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<210> 1164
<211> 1228
<212> DNA
<213> Homo sapiens

<400> 1164
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atccctcctc caggattagg aggcggggcc tttggtgatg ctaggcctgg tatgccttca   180
gttggaaaca gtggtttgcc tggtctagga ctggatgttc cgggtttttgg aggtggacca   240
aacaatttaa gtgggccatc gggatttgga gggggccctc agaattttgg aaatggccct   300
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gggcatttgg gtgggccacc agcttttggg cctggccccg gccccggccc cggccctggc   420
ccaatccata ttggtggtcc ccctggcttt gcatctagtt ctggaaaacc aggaccgaca   480
gtaattaaag tgcaaaacat gcccttttact gtgtctattg atgagatttt agatttcttt   540
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acaggtgaag ccatggtggc ctttgagtct cgggatgaag ccacagctgc tgtcattgac   660
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agtatttcca ggttagaacc tgtggattgt ttcaattgca tatagcttgg tttccataac    840
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tctgtataca aaaaaaaaaa aaaaaaaa                                       1228

<210> 1165
<211> 2241
<212> DNA
<213> Homo sapiens

<400> 1165
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tttaaatgtt taattgtatt tgattaaaca cttaactgga ttttggaata ataaaactct   2160
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aaaaaaaaaa aaaaaaaaaa a                                             2241

<210> 1166
<211> 1577
<212> DNA
<213> Homo sapiens
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<400> 1166

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ccatcatgtt tgctgccaac ctgactctgg ggctgtacat ccactttggc cccaggcctc     180
tgagccccaa cagcactgcg ggcctggaaa gcgagtcctg gggggacttg gcgcagcccc     240
tggcagcacc cgctggctac ctcaccctgg tgcccctgct ggccaccatg ctcttcatca     300
tgggctacgc cgtgggctgg ggtcccatca cctggctgct catgtctgag gtcctgcccc     360
tgcgtgcccg tggcgtggcc tcagggctct gcgtgctggc cagctggctc accgccttcg     420
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aaaaaaaaaa aaaaaaa                                                   1577
```

<210> 1167
<211> 2110
<212> DNA
<213> Homo sapiens

<400> 1167

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tgtgcttttt tgtactgtaa aaatatgtgg ttcatgtcta actctgctgt tttattgtgg     180
ttgtggttca agtttttaat gtttaaagtt gatgctgttt tcagaagagc tttttactaa     240
tttatttgtc agtgttccct atttgttact taaccatgat cctccagatt ttttggagta     300
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tttgcaatgt taattattta gatatttaat ttcgcagatt tttaaacttt attttcataa     540
tttctgctta atgtttaaaa ttgaagagcc ttttcatgta ttaaataatg aacacaaatt     600
atataattaa aataattgga gatgttgaaa atcattttcc cttcttaaac agaaataaat     660
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atgtatggtt tgttttacct tcatttctgt acaagtaaag cttattagtc taatgttttg     780
ttccttttcccc acctcacccc tacctctttt gtttttgtttt gttttttgccc tttatgtact     840
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aatctttgta ctgatgtaaa tgattgtagt tattttggat agtgtttttgc taacaaaagg    1440
agagactttt ttcatgcata tttctatttk gtttttttgg gwtttatttt attttaatag    1500
tagtaaaata cttggaataa tttttcatat tcttgtcatt aatattattt tgtattttta    1560
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684
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tgtggaaata tataatttta tgacactaat tgctaaagtt tattttatgt tgaattattt    1620
ttggagctga aatctttgta atattaaagc aactagtttc taattcccag tttctgtata    1680
gaatcgcaca agtggtttat ggagtgtttg gattgtaatt ataaatggtt ctttgatatg    1740
caaattaata ttttcagttg attttatttt atattcctaa tggggtgtta aagccgtttt    1800
ttattttttt ctaaataaaa agagaaccca tgcttttatg gacactaggt aaacaccttc    1860
agcttaaatt tttcgttaaa tattttagtt tattttattg ttatcttcca ggtgtctaaa    1920
tctccagtct gtctgttgta ctggtaattt aactctgtaa tggaatagtt tgctgccaac    1980
tatttatatt aagtaatttt taaatatttg taatattgtt gactgactaa taaactatta    2040
agttattggm awaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    2100
gggcggccgc                                                           2110


<210> 1168
<211> 1825
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (270)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (814)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1816)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1825)
<223> n equals a,t,g, or c


<400> 1168
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tagtgaaaaa taaaactgcg gctacaacta ctgctttgca atttacatac ccactgttta    180
ctacaaatgc ttgctctact agtggaaatt ctaatctttc acagacacag agttctagta    240
actcatgttc tgtacttgaa gctgccaagn accaggatat tggattgcct agagcatttt    300
ctttctgtta tcagcaagaa attgaatcca ctaaacagac gttaggtagt agaaacaaag    360
ttttgcctga gcaagtttgg attaaagtgg gagcagcgct atgcaaacaa gcactgaaga    420
ggaatcggag tagaatgcgt cagttggaca caaatgtaga gcgaagagcc cttggagaga    480
ttcagaatgt gggcgaaggt gccaccgcca cacaaggcgc ttggcagtcc tcggagtcct    540
cacaggcaaa cctgggggag caggcccaga gtgggcccca gggaggaagg tctcarcgta    600
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gttaactaaa aacagtttgg aaattttatt tcattcgtta tatcacaccc ccttgtcatg   1380
actctgagtc acgtgctgct gtattgcaac gtgcaggacc attttaaacc tgtgtgctaa   1440
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685

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aaattttcca gatacttgct ttaaagctac ttttgtccac aaatgaaata ctgtcacagt    1500
agacgcttaa atgccacgtt ttcataccaa gagtcattca ttacttcatg tgtcacaaac    1560
tgtggtgttt ggaattgggt tttttcaatga gtggctttac ttatcacaac aggtaatagc    1620
aatagaygtt agtgcaatac aaagtcaccc tcaataaata ctgttaattg ggagatgtga    1680
gtttgtacac aaaacatcag actagacctt tgtatgggag agaatttact gtacattaaa    1740
ttctttattt tttgttaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1800
aaaaaaaaaa aaaaangggc ggccn                                          1825


<210> 1169
<211> 1349
<212> DNA
<213> Homo sapiens

<400> 1169
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gatcgaatca tatttgtaac caaagaagat catgaaactc caagcagtgc agaattggtg     120
gctgatgacc ccaacgatcc atacgaggag catggattga tactgccaaa tggaaacatt     180
aactggaact gcccatgcct tgggggaatg gccagcggtc cctgtggaga acagtttaag     240
tcagcctttt cctgcttcca ctatagcacg gaggagatca aggggtcaga ctgtgtagac     300
cagttccggg ccatgcagga atgcatgcag aaatacccag acctctatcc ccaagaggat     360
gaggatgagg aagaggaaag agagaagaag ccagcagaac aagcagaaga aacagctccc     420
attgaggcca ctgcaaccaa agaagaggag ggatcaagtt aatgaaggcc acaaggcact     480
gggcaccagt ccttttggag tggacctttt gcaaaaggcc ttgtcatcac cttccaagaa     540
agtttccttc tgttgtcctg tgcattataa tatacaaat aacttatttt gatgatcaga     600
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gtgtcctacc caaacctgtg gccgccactt ttgaattctc agattgccct gaattttgcc     720
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gcagaggcca gatggtcaga tatgatttct gcaaacccat cttgaccttg agtatgtgaa     960
ggggtactgt actttattcc tgatacattt tggtttccat gtaggtgttg agctcctggt    1020
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gggagaggct ggcttggctg ttccttgtta ttccgaaagc cctggtttgg ggcccatgtt    1140
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ccagagtagc agcaagagag gaaacgttgt gaattaagta ttcaattaaa aggaaacatg    1260
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aaaaaaaaaa aaaaaaaaaa aaaaaaagg                                      1349


<210> 1170
<211> 1273
<212> DNA
<213> Homo sapiens

<400> 1170
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tggcaacact gcatgaggtt gttggttttg ttttgttttta ttaattagtc tttcacagga     120
ggaataattg ccctcctttta tatacttatc tattgataat cccctctccc tccagaacac     180
aaatcagagg gaaagggggt gttcagctgt actaccaaat caggaagatg taaggtttac     240
aaattggcta agaatcatgg ctctgtagcc atttcaacca gaataatttt attgctaatc     300
tgctttgtgt gacagcattc caggccagcc agatgggact gccttgtctg gaggctttgt     360
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gttgtaaatc aagtgtgtgg atctcaaagg gtgcaattta tctttatata ggaatacatt     480
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gcgcttgaag agtcaaagga atctgtgtct aatatcctgt ttttaactgc tgtaggggca     660
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aggccagcca ggattgctgc tgctgctgct actcctgcca acacccettt cattggcatg     900
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accaccccca gtcgtcagct ccttccctca tttattttttg ttaagttgtg tgaattattt    1020
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686

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ttaacccatt tatcctgttt gtgcataggg tttttaagaa gaaacagcac agtgcaacga    1080
gcaaatcttt ttggggtgtg tgggaagcaa gggagggagg acatggagaa aagttcttta    1140
aacaaatagc aaactattga acatgtgtaa aatcctgtat catttatgaa atatgtataa    1200
aaagcaatgt accttctgga acaataaata cttattcaat ttttgaaaaa aaaaaaaaaa    1260
aaagggcggc cgc                                                      1273


<210> 1171
<211> 1468
<212> DNA
<213> Homo sapiens


<400> 1171
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ctgcaccaac cctcagccaa caagccgaag ccccccacta tgctggacat cccctcagag    180
ccatgtagtc tcaccatcca tacgattcag ttgattcagc acaaccgacg tcttcgcaac    240
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agtgaacctc ttccctcgtg ccctgggtca cctcctctcc ctgatgacct cctgccttta    360
gattgtaaga atcccaatgc accattccag atccggcaca gtgacccaga gagtgacttt    420
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taccaggcag tggccacaat cctggcccac gcgggctttg actgtgctaa tgagagtgtc    540
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ggtgtgctgg gcagtgatgt cttcgaggag cctatttcag gcatgagtga agctgggatt   1140
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aaaaaaaaaa aaaaaaaaaa agggcggc                                      1468


<210> 1172
<211> 1176
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (639)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (700)
<223> n equals a,t,g, or c


<400> 1172
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ggatctggag gccagcactg ttcacctgat ctccaccact gagatacctc tggctagagc    180
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aaggttgtct tttcagtcta aagttaacaa tgacacacat gaattttcat atcagtataa    300
ttagatgcgg gtcccatcta attacagtgg gtcattatgg ctgttcggtt agagcagctt    360
gggtgctctg tgaccatggc atgtgcccgt gtcaggacta gacaaagtca tttgcttggg    420
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687

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gaagctctct ccccttcagg tgtgaggcca ggagcacctg gtgtgggtcc tgtccctgag      480
gttctgtcct acaccaccct catgcaacac ctactacaca caggtgcaca gcgactgtca      540
caggcgcttc atgtttaagg atgggcctcc gtgtcataaa ctttttttaaa gggtatatag      600
rgatagctta tgraatccaa atcaaaggtc cagagtttnc agcaaattgt acctacctat      660
ttgccaactt aacctcacca tagaaagcca aaagattcan cctgtggcca gtctttcaca      720
ttacagagtt taaagtactt tttttaaatt yctattttat ttttaacaaa atatttaaca      780
aaatatagta tatctcatgt gccaggtact atttgtaata tttataaaca ctgatttayt      840
taatcttcac agagactcat tttacagatt ggaaaacaga ggcagagaga agttaagtaa      900
ctttaatgtc actcagctgg gtagtatcaa agtcttggct gctggctcca gagtctagac      960
ctttaaccac tgtgttatgc tttccatggg taaagcaacc taaaaaggcc cctggaatca     1020
gttacatgtg gttggagact aactctgtca ttgacttact aaatgcttga tattgggcaa     1080
tttatctaac ctctctctgc atttagtaag tcaatgacag agttagtctc caaccactgt     1140
gttatgcttt ccatgggtaa agcaacctaa aaaggc                               1176
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<210> 1173
<211> 1779
<212> DNA
<213> Homo sapiens

<400> 1173
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cctcagtgag atatttggta ccatggtgta agctgatagc acaagttctg gcgacaggta       60
gcacgtatct gagagacacc tgcaagcaca cactgtccca gctggtaccc ataatgctgc      120
tgttcctgct gctgctcctg ctttcctctc ttctcgcttt aaatgattgt tagcaagtta      180
gattttcctg gagcttcgga agaaatgaaa atggaaacat gatgaagata tagtcactga      240
atcaatgaga aaaataatga acatatgaat accacctaaa aatacactga ataaagtaca      300
ccatatagca ttattttttat aggaaatatt tcatgtccct taaatatctt gttagttata      360
gggatggaca gtttatgtta agcacttagc ttaaacaatc cgtttatatt agcactgtat      420
cccttgtgcc atccaacatt ttgtatgttt ttgtaaacag ttcatataca gtacatttct      480
gtactgcttt ctttaatgta tacatgcctt gtttaacttg gaatctatta ttattaatca      540
attgactatt aaatctggtt aaatagttca cctggattaa cagtattgtt ggacagtcct      600
aaaaatggcc agattgtgga acagctgttg aatgtaatac ttccaaaatg tacatatctt      660
tccccacgtc tgtttcactg gttcgttcat ttgtttgttt cttaaagtca ggtgctctgt      720
cagactaacc tagagagctg ttatggtaga gaaagttatc atatgtgtgt ggcatgaaat      780
caagaataca cctatgaagt tagtccatat actttgcaac tccttagagt acttttttcc      840
ttaattaagg aagtagtcct tgcacttcta atcttacata gcatccatac ttagaatttg      900
gcatatcatc tgggattttg ccaatatacg tcaaagccct ttaagagtca tggtaaggag      960
atgggtgaag gaaaatttag caacaggtaa ttgaagtcct attggatatt tcatgtttaa     1020
atagatattc tatattaaac actaatttaa atgtaataaa ggccaaaggc ctctgtatga     1080
aattggattt aaactttctt attttaggga ataaacatt attgatcaaa cagtatctgt     1140
tctaacctaa aattataggt agggcaggct aagtgaacag cattgaggat tttctgaatc     1200
cctcatgata atttatagcc acatactgct tcctttgact tcaggaatga tcaggtttca     1260
taatggccac tgggcctgct tagattgcag tattcattat ctgcatctaa tttggtagtt     1320
tccacaatcg gtatttgatg aaagaaactt cagtccccat tattacctgt gtctttgcca     1380
agctgcctag catacatcag tatgtaatgt aaaagacata tgagcaagaa aaaagtgatt     1440
taacttacct catcaagaat gtgcccctac aggccgggcg cagtggctca cgcctgtaat     1500
cccagcattt tgggaggccg aggcaggtgg atcacctgag gtcaggagtt tgagaccagc     1560
ctggccaaca tggtgaaacc ccgtctctac taaaaaatac aaaaattagc tgggcatggt     1620
ggcgtgcacc tgtaatccta gctactcagg aggctgaggc aggagaatcg cttgaacctg     1680
ggaggtggtg gttgcagtga gccaagatca caccattgca ctccagcctg ggtgacagag     1740
tgagactctg tctcaagaag gaaaaaaaaa aaaaaaaa                             1779
```

<210> 1174
<211> 1473
<212> DNA
<213> Homo sapiens

<400> 1174
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cggggtggta ggcaaaggtg cttggggtcc ggccaacgct tgggctgggc acagggcgga       60
tcagtagatt gggtcagata agacgccatt tgaccaggtt cacgttttttg tggatcgagg      120
ggtttcccat ggagtgatat aatggggggcg cctactagga agtgcagtgt tcagtggctt      180
tctctatctg ttcctttcct cagcgcccag tgtagcgcgt ggcgttccat ataagttgtg      240
```

688

```
gaattgaaat ggattccagg gccatgccat tccccttctc tcattctcct cgctctccac   300
cccccctccc ccgccaatgt cctggaagga cgcccttag tgggtgcctc ctaggagctt   360
ggagcagctg gcagctctct tgccgggctt gcacggcacc cgggctcagt tgtaggtggt   420
aaggggggctg gaagactgtg tccggctcct gccttgggga ttccgaattg aatccgcgct   480
gagactagaa cacgccctcc caagggagca gtcccagagt catccacccg aggcggatta   540
atcttctctg agtagaaatg tgaaaagccc acaccggcca ggaaccctcg cttcgattca   600
ctttattttc cagccagcga ttttcctttg aacatataggga tcccatccag gaggaggaga   660
cacagctcct agaaacagga tccgccgggt cctcctcctg cgcgggtaga cgcagaacgt   720
tcccacagtc tactttatgc gagcgtggca cccctgcttg aggcaccccca gagcaccctc   780
gggccgctcc ttttcacccg aaagatagga tcacccccca gttaagtcgc ttctgggttt   840
tccgaaactc acctgacact cccaacaccc cgaccccgtc ccggggctcg ctgctgccac   900
ctactgccca actcgaatga aatttcagac gcatgatcaa gcccagttta atagggagga   960
aaaaaaaaaa ccttttcttc tccatgactg gggctaagag ctgttctggg acaagcatgt  1020
atgtgtgtgt ggtgggatgg gatgggatgg ggtgggagga gggggcagca ggggattttt  1080
ctagctggtg ccagagcagc caggcctctt agaggtgggg tgagtctggc cattgtgcaa  1140
cccccttccag ttcctctgag cagataatag ctgaatccag atggtgacag cccgtgtgtc  1200
accgtttcca gttgagtcta ggatatgagt aactggactg aacaaaaggc cttttaaagag  1260
accagccagc ttcctagaag agaggagatg ctactcattc taggggtggg gtcgggtgtg  1320
gggggataaa caaacaagtg gaaaacccat tcgcaggatt ccatacccttt cctgtgagaa  1380
ttgtaactca aggctgctta cacttgagtc ggactgtagg caggttgctt aaggctgcat  1440
tgtcccagcc tccccaaaaa aaaaaaaaaa aaa                                1473
```

```
<210> 1175
<211> 779
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (652)
<223> n equals a,t,g, or c

<400> 1175
cccacgcgtc cgcatgagtg gtaggaaagg attactgtca aaaataccta tttcaggtgt    60
cacagtcaat aatagcaaga tagcataaat tgactttttc cgccctaggg atatatagtt   120
tatcttcttc agatttctga ggattaaccg aagcaatttt taccagcatt cacttcttcc   180
taacgttgtc agactgccct ccttcaagga aatctcaaat ctcttctgga agtatatggg   240
acatgaaatc tagcaggtta aaacttacta taaatgtgtc atctgaagaa tgcaatctca   300
tttcctcaaa gatttccacc ctgaccctgc cctggacaag cacttcttgc ttttttagaag   360
taagacctat aaatcctgta agtaagttac agggctctac attaggaaca accaggcata   420
ggcaggggkc ttgtctccaa aggaccttcg gkctatcaca gcataatgct ggcactaaac   480
ttactgtggt aaactacagc aaacagatca ttagaaagac aacacgcaaa caatgtacaa   540
tgtaattagc cttttctaac cagtgtaccc ttggcttcct aaacaataac aaaaacaagt   600
gacacagaac acataacagt gagaagtaac gactagttca taatataaaa gnccttttata   660
ctttttcaat aaatacggta tttggttaaa aaataattat gttgacttag wgattaaaat   720
ttgtttaaat ctattactaa aaaagaacac gcaatgatac acaccaaatt taaaaaaaa    779
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```
<210> 1176
<211> 1332
<212> DNA
<213> Homo sapiens

<400> 1176
cccacgcgtc cgtttacatt gactggttta tgaatgttaa accagccatg catttttggg    60
ataaggcaca tttgctcaga tatattcttt ttcttatctt ccccagtttc tctcattccc   120
cataatgctc cagaatttct aattgccaaa atgcccttta aatacttgtt catgggtttt   180
atctctcaca ttctctccgc tccttcttca gaaactcttc acctgtttca cttacctagt   240
aaagagtctg aagcagatga ctgatttttac attttctctgg gaaattcaag cagttcattg   300
aagattatct tttggcatta agaaaatgca atcaaggtca ggcgtggtgg ctcacgcctg   360
taatcccagc actttgggag gccgaggcgg gtggatcacc tgaggtcggg agttcgagac   420
cggcctggac caacatggag aagccccatc tctactaaga atacaaaatt agtcaggcgt   480
```

689

```
ggtggtgcat gcctgtaatc ccacctgctt gggaggatga ggcaggagaa tcacttgagc    540
ccgggaggcg gaggttgcag tgagccaaga tcatgccact gcactgcagc ctagaaaaca    600
agagggaaac tccatctcaa aaaaaaaaaa aaaaagaaa ttgcaatcaa gtgtcactta    660
atgatgggga tacattctga gaaatgtgtc attaggtgat ttcttctgat gggaacatcg    720
tagaacatac ttacacaaat ctagatggta taacctactg cacacctatc ctatatggta    780
taacctagtg ctcctaggct acaaacctgc acagcatgtt atgtactgaa tactgtaggc    840
aattataaca ctatggcaag tatttgtgta tctaaaccta tttaaatata gcaaaggtac    900
taccgtagta aactttttatg ggaccaccat cataaacaga gttcatcatt gacctaaatg    960
tcattatgca gcagatgact ttattcaatt tatatttaaa gagaaccaca gttctgatat   1020
gttagacatt agtaatgcca ttcaaaaact tgagtcaaaa actacataaa tatttctgaa   1080
aatttaaaaa atgtaaatgt atattacaaa aagccaaaag aagtagtaaa aagccaaaaa   1140
agagtaatat caatttcatt taaaaataaa ctgaagtggc tgggcacggt ggctcacacc   1200
tgtagtccca gcactttggg aggccaaggt gggcggatcg tgaagtcagg aaatcaaaac   1260
catcttggcc agcatggtga aaccccgcct ccactaaaaa tacaaaaaaa agaaaaaaaa   1320
aaaaaaaaaa aa                                                        1332

<210> 1177
<211> 2129
<212> DNA
<213> Homo sapiens

<400> 1177
cacgcgtccg cggacgctgg gctgttttat gtgtgtgttt gtgtatgtgt ggtgtgtggg     60
ggtgactgtg agagtgtgtg tgtggtgtgt gtgtggcata tgggccaact attatgaatg    120
tgtgtgtgtg tggcctgtag ggtgactatt ttatgagtgt gtgtgtgtgg catgtgggat    180
gactgtttta tgtgtgtgtg agtgtgtgtg tggcctgtgg ggatactatg agtatgctgg    240
tttggagtgt gtttctttgg gcctcagttt tctcctctgt ggaatgggga tgatcatggc    300
gtctcgtcac tgggccgtgt gaggatcgaa ggctgtgttg tttgtgcagc aggcagaagg    360
gatcctggta ggagcccacg cgtgggagcc tctcatgcgc catcatcagt gtctccaagt    420
gggtccgaca tggtgggagc agctggctcg gcctgtctcc ctggcagccc cttccagcct    480
ccacaggtgg tcccggctga ctcatggcct gggagggcta gggtggtgg gaagcccgcc    540
ctcgagactg tctctgcccg gctctggcca cggagtgtcc cctgtgtcca gcactatgtg    600
cccctgtgct cctgagtccg gaaacagttc tgtggggtcc acatccctcc cccatctcat    660
agcagaaggg actgagcgtc caagtggata aaggatgagg ataaaggacc gtgccaaagc    720
cagatgcctc ccagcgaggg tcacaatctc gcttccacct catgagtggc tgcggcgcct    780
cgggaatgaa tctgttccat gttctgtgtt gggagctggc gctggggggac cacaaccctc    840
aaagtcccca gcaccaaggc aaagtgcctg gggctcaaga ggggaagccc acctgacggg    900
aagctgaggg cagggcctgg gtcatgtccc cactggctgc accctcagga gggcgggatc    960
catcaccctc atccccatgc agggaaaggc ccagggacca ggtcagaatg acacagagcc   1020
cttgagctga tgcctcccct gacccctcac tgagggccat gctagaaggg gggatcccta   1080
caaaagggga aatcctgagg ctctggaccg ggcctccagt aggggctgtc acccctggct   1140
ctgaccttgc tcccggagcc cacctcccct gggtcgcctc ctggtcatgg gagcctccct   1200
ggggaagagc cactcctagt gtcctagaga tgtggcccca ggcgctttct ccaccaggct   1260
gcaaatccct tcccaagctc acatccccca agtcgtcatc cagcccaagc cgagccccca   1320
gttgcacccc aaggccttag cacaaggctg cagctggtcc tcgagccatg atggacactt   1380
aactcctgtc ccatgcatgt gccagtgcct cacttactca ccttggtgaa tccttacagc   1440
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ggttaaatca ctcactcaag gtcacacagc tgttcaatgg cttagatggg atttgaacag   1560
aagtctgagt gagtccagaa cctgggactt cagccaccgg gagtgtggct cccaactgta   1620
catgcatgca tgtacacaga cacacgctac ccagacactt ctcacacctg atgtgcactt   1680
gggagcagtg ccccggctcc cacctgttct cgtggcacat ctgggtagag cctgggtgtt   1740
gctggtgcct gaggcttgcg tgagagcttt ccacttttcc ctaagtctcc catcaccact   1800
agggttatgt gaattggctg cgcgtgatgg ctcatacctg taatcccagc actttcggag   1860
gccgaggcgg gaggatcact tgaggtcagg agttcgagac cagcctggcc aacatgggga   1920
aaccctgtct ctactaaaaa tacaaaaatt agctgggcgt ggtggctcag gcctatagtc   1980
ccagctactc aggaggctga agcatgagaa tcgcttgaac ccgggaggcg gaggttgcag   2040
tgagccgaga tggtgccact atactccagc ctgggtgaca gagtgaaact gtgcttaaaa   2100
aaaaaaaaaa aaaaaaaaaa aaaaaaaa                                       2129

<210> 1178
<211> 2332
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690

<212> DNA
<213> Homo sapiens

<400> 1178
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ccacgcgtcc gcactatcaa ataaaaatag ggcatttctt atggtagatg ggagtaagaa      60
atatcatctt ctgtttttaa aaaatgtaac tatataaatg ttaagaaaga aatctattga     120
ataaaagttg gagaaaaaag aggatggttg attttaaact ctactgactt ggttgacttt     180
tacttgatat gtgctatctg aaaaaatgga caatggccac tccctcattt cttttttct      240
tccttttatt gaattttaac agcagttttg tctggctctt ttcatttctg tgtttatttc     300
ctgtaaaatt gtgatgcata atcagagtaa gtttttgttt gtgtatgatt ttgccatgaa     360
aagtcactgt gtatctgaag ccaaaattac acttagtatt tcatgcggtt ttggctgatt     420
tcctttctat ttttcttcat taagcaagtg ccatcaaggc cagcagtacc catattatat     480
gtccagagaa gagccaggcc agatgggaac tgcgtgaaag caaccagtta tcttgctaat     540
tatgccagct agaaccagtt gtattgcatt aaaaaatgtg gaatccaaca acttagctgt     600
tcacactcaa ttagcagtgt gctggagaat ggaaaactca agcaaggagt ccatgtgctc     660
caggaagtga cagctgcttc cttacccagc atttaatatc catgtaaaat tttttcaata     720
aacgttgtga taatttttgc aagaatcatg tatatgttat gtctctaatt catctcataa     780
tttaaaaaaa acataaagtt cagtggtcta tctccacttt ataacctttc tttagcccac     840
atgaagaata aagtgcaaaa gtaagccaca aattcttgac atgttttcaa aaagaagaaa     900
tcagtagaga aaggagaaaa aaatcaggaa gacaacaatt agcgtattta tcataaatga     960
aggaaataaa acatcgagac taaaagaaga ctcaagtgtt tcatttgtac atcttctgag    1020
ataaaaatag ctggaaacgg caactcactt cactggcatt tttcgttcca ctgtctgtca    1080
cagatgatgc cgagtttctc tttctgactg atcttcaagc tgaaggtaat gtgacagcag    1140
gaacattaca attagtatgc gaatacctat cccctgggtt acaaattggc attctttaaa    1200
ttctgctatt ctcagctttt ttattttgt tattaacttt tcattggtca aaacacttaa    1260
acttctaagt aataaataac tctttgaata aatgtgacat ttctctgagt ctgtggcata    1320
attgaaataa attccatctg aaagtttttt ctgaagttca tattcatctg tttgcaagac    1380
aactattgtt cacaggaggt taaaccaata tataatgata tacatattat aaatatacat    1440
atttataatt aatattcacc tttaagtctt taatctgcct aagagatcat tttgttttcc    1500
tttgttcttt gattttcaga gaatctgagg agggctctac ctttagtata cttatcttaa    1560
acaactatat atgtttaact atttaagcaa ttttattcat gaactaaaat gttctaatat    1620
aagacattgc agtttttttt gaaatttatg cagttttat tgcttaataa catacatttc     1680
tctctttaa ccatggatct caagtcattt tatgccaata tttctttatg caatatgatg    1740
tttaatgtaa taaggctaat atatttatca aaacaaagac catatattgg caattttaat    1800
tatagttaaa gttttataac ttcatgcttt gtcaagcttt tatctcaatg taatacagtt    1860
ctttggtagt aaaattcaac tggtatgtgt ttatgaccct caatgtcaat taaaaactct    1920
tgaaagattg acaattttc aggtgggaga aagaaagcag tcaaagaag gtaaaaaatg      1980
ttcttctcct tgacttaccg tggaaatgcc ctagttgatc tatagaaatg gttagtatca    2040
gtggcccctgg actaatgaaa ctgagagaag tagaagaaat gacctaaaaa gtcggtgtat    2100
cattaagaag ggaaatcatc aatcagcacg atcccttttg ttaattcaag caccattaag    2160
taatgttctt aggataagca aaaactgaat cattaaacat attttcactt tttgtttgc     2220
tcagggggga taatgaagta ttaattttat aatatatgct tgaaaatagt acagtttgga    2280
aaatacactg tcaaaattta aagaccctct tggttaaaaa aaaaaaaaaa gg            2332
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<210> 1179
<211> 1907
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> n equals a,t,g, or c

<400> 1179
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aagtcatatt actaaaagtt tttnccgttc aggaggagtt ggtctcactt ttttgtgttc      60
agatagtgga gaactgtgct cccgttctag ggccctccct cctttctctt tattaacttc     120
tccccacggg agaaagaatg gcaaattgga aagctcgggg cttgacatta atatgagtga     180
agtcactgta tttccacatg gctttcgttc tttttttttt tttttgcgg gggaaacaag     240
gggtggaggc ctgcagaaag gtgccagcta tcctctactt tttgcctgct gtcttcaggc     300
aataaggaga ttagggaggt gttcccctgg caggcctaat ctggtctata cttcttctag     360
```

```
tccagccttt gcctggacag gtaaatcagt tcaggtttgc tctgtgaacc tggccacctt      420
caggtctgga agaagaacat aggaagccct gctgacgtca ggcttaagct gtattctcca      480
gcacatttac cagaagcctc tggggttgtg tgtgaccatg cctcgaataa agcccatgtt      540
ctgatcccca tctgtctgtc agatgttatt tgtggatgtt atttgtggtt atgcccagtt      600
ggttagaacc tagaaagtga taaaagtgag ccatgcagcc gggcacggtg gctcatgcct      660
gtaatcccag cactttggga ggatgaggtg gatggatcac ctgaggtcag gagttcaaga      720
ccagtctggc caacatggtg aaacactgtc tctactaaaa aatacaaaaa ttagctgggc      780
gtgatggcat gcgactgtaa tcctagctac cgggaaggct gaggcaggag aatcccctga      840
acccaggagg tggaggttgc agggagccga gactgcgcca ctgcactcaa gcctgggcaa      900
caagagctaa actctgtata aaaacaaaaa ataacaaaaa aactagcgag ccctacagct      960
gcaggctgag gttctagttt tggcaataag ctaaagtgta aataatttta catttaaaac     1020
tatggaacaa atagaggtgg gacatgggct gcccctgccc acctctccag ccagttcccc     1080
gactcttcgt cttctttctg ctgcatgtgg tctgaccatc ttagttctca agtttgmcaa     1140
actttttttc agccatgtgt cctttgccta tgctgktttc tctgctaact ttctcttttt     1200
tttctctctc ttacttgctg cttttatggt caagttctaa ctcttcaagc gtacacttaa     1260
atagtacctt ctytgacccc gtaggctagg ttgattgctt cagtgtacta aggcaaaaat     1320
accctgagta tctgtgctca ttaacctctg tgtttccctt ttgtaagatt tatcacaatt     1380
gtaatcaaat atttatgcta tgatatattg gttgcctttc tagattttct aacagtcttc     1440
tttgcattgt tacataaagt gtttagtgca gagctgggca ctcatatttg gtgcctgagg     1500
gagatttgtt gagtgaataa aatagcagtg tccagcagcg acatagactg ctgagatatg     1560
gcatgtcaga gtctgaaagg ctctgtccag ttggcaagtg gaattcattg gatgtttttac     1620
aaagaatagt tttagtaagg kggtgggggac ggaagtgagt ttgcaaagta tcttataaaa     1680
agctagactt aattactcat ttacgcaaca ttggaaccct tacaagtgat ttctctrctg     1740
agagcaactt ttcttgagtt ttactaactc agtagacact gtcagaatct gccagattac     1800
aacaaagggg taaaaattcc tgatcacttg aggkcaggaa ttcaagacca gcctgggcaa     1860
caaggtgaaa cccgatctct actaaaaaaa aaaaaaaaa aaaaaaa                    1907
```

<210> 1180
<211> 1639
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1623)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1624)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1625)
<223> n equals a,t,g, or c

<400> 1180
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gaactgtcag actctcaagt aaaagcagcc agaaagggga aaaaaggta acagattcag       60
cattgtccaa aagttccaga ccagtgatta atgtgtaaga taatggactt gggaaatgag      120
taaacactcc ccatgctccc tgctttgtgc ttgaacgact tgatgacaag ggcagagcaa      180
ggtgagaatt taaacaggac cacaggaaaa aaaaaaaga caaagactgg caacaacata      240
atgcgaggga gggggagttt actggtttgc agtctaaaag gtacataata actttcttca      300
aagcaggcct taacagtgta ctaatttaaa cttcaacatg ggcatggaat tacccgtaga      360
aattatatgc cactcagtca tcttttaata taccggatat ttatatgtac ttgtttcat      420
ttatttgttg ttaacttcct tcggcagacc cattaagcat ttagatacat atttgtgttc      480
agatgtatca tcctcaggga aaggagatgc tgtatttga ttaagtggtg catttcaagg      540
tatttcaagc tattcttaaa taattatata ggcacatttt agagtattcc tccataaaaa      600
aatatttgag gatctggatg ccttgctagc tgtcgcactg catttcttag caatctgtca      660
tcacttgaac ttacactttt cttgatcaca ttgaagacct ttyatatgta taaaacattt      720
atttactttg aataaaactt gttttgtttc caggttctca ctccctgtat ttctttagac      780
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692

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acctacagag gtgttttcca gggatctctt tttataggat cagtagctta aacatgttaa      840
ttttgtcagt gttttacata aaaatctatt tctgctctgt caatctgttt taaatgcaca      900
catcacaact gacacccact gaggatttat ttgkctctaa aaaaatcctg acaatttctc      960
tggacaaatg ktacccattm ccttaaacgg tgcttaatga actttgagca atggccatgg     1020
agagactgtg ktcacagscc taaatctcta tawtgttgtc aggtaatcaa gtcttcggtg     1080
gtcaatttaa aaatatttga aattatcata ttggttctga atacaatatt catcattttt     1140
cttttaatca tagagaggtt tgtaattatg tttatgtata ttttgtaaat taagtccata     1200
atttaaaaaa tcttgatatt gcatcttcct aaaggcactt cagtgattca accctgaaaa     1260
gcatgataat acagaaatgc cattgtgatt atcaacaact ggattgctac tttcaaagta     1320
cctttaaggc caggcgtggt ggctcacacc tgtaatccca gcacgttggg aggccgaggt     1380
gggcagatca cctgaggtca ggagatcaag atcagcctgg ccaacatggt gaagccccat     1440
ctctacaaaa atacaaaaat tagctgggca taatggcggg tgcctgtaat cccagctact     1500
caggaggttg aggctggagc atcgcttgaa cctgggaggc agagattaca gtgagccaag     1560
attgcaccat tgtactccag cctgggcgac agagcaagac tctgtctcaa aaaaaaaaaa     1620
aannnaaaag ggcggccgc                                                 1639

<210> 1181
<211> 1858
<212> DNA
<213> Homo sapiens

<400> 1181
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ctctcccagg acgcctgcac attacctctc catactgcag cccttttatat ggaaacttcc     120
tacatcactt tgctgtgtgt gtttacacat gtgggttttg ctgtacttgc cctgacagca     180
cacgggagtg caggccacac cccaacccac accaactgcc actgaagaca gagccttggt     240
gggcacagaa ccaagaaccc cacccctgcc agcacctaac ccttgagcta atgctgtgca     300
gataaatagg gaccttctta taccctgagt gaccacagtt gctttgaggg gcacagagaa     360
ggcaccatgg cctgcactgg ccagcagccc accctgaacc aacactacct ccagtgcaac     420
acacacacag caggggaccc ctggcccaca ccccagctgt cttgcctcca ccactgggtg     480
aacgccctca gggaggcagg gaattttgca tccactagca ttctgccaca gttgccacac     540
tttggtcccc tcagtgcagt ggactccaaa cctccaagag ccagggaaca aagttggggc     600
ccaagacaag ttccccagat ttaaagcaca cagtccagga attgggagcc gcacattggc     660
ccccctaaaa tcctccaaaa acaaagccag ttagttgaat ccaccttatc ccacaatgaa     720
actctcaaga tcatcaaata caataaaaga aaaatactct gtccgaaagt cagcaacctc     780
aaagatggaa ggtggataag cccataaaga tgagaaagaa tctgtgtgag aacactgaaa     840
actcaaaaag tcagaatgcc ttctttcctc caaatgactg tatcaactct ccagcaagtg     900
ttcagaactg ggctgaggct gagatgtctg gaatgataca agcagggttc aggatatgcg     960
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atcattgtaa aacattgcag gagctaacag acaaaatagc aagtataaag aagacataac    1080
cgacctaata gagctgaaaa gcacactaca agaattttca taatgcagtc acatggtgat    1140
tatgtgtgac tggattatga aaattattgt agtgtgtgtg ggcacccgag attgccctgt    1200
aagcaggtgt ggccagacag gggtcctggg agaggcaagc agactaagga gcgctgaggt    1260
cacaccagtt ccatctcatg tgcaagacca cccagcagaa tagaccaagc tgaggaaaga    1320
atcccagagc ttgaaaactg gctttctgaa ataaaacagg cagacaagaa tggggggaaaa    1380
aagaaggaaa atgaataaac aaaacatcca agaaatatga gattatataa acgaccaaat    1440
ctatgactga ttagtgtacg tgaaagagat aaggagaatg gagccaactt ggaaaacata    1500
cttcagaata tcattcatga gaatatcccc aacctatcca gacagaccaa cattccaatt    1560
caggaaatcc agagaatctc agtaagataa gccacgagaa gatcatcccc aagacatata    1620
atcatcagat tctccaaggt caaaatgaaa gaaacaatgt taaaggcagc tagggagaaa    1680
ggcagtgtca cctgcaaagg gaattccatc agacttagca gacttctcag ctgaaaccct    1740
acaagccaga aaagatattc aacttcttaa agaaaagaaa tttcacgtag tatggcagag    1800
acagatatac catataataa catggtgtta ttataaatga tttaaaaaaa aaaaaaa      1858

<210> 1182
<211> 1036
<212> DNA
<213> Homo sapiens

<400> 1182
aattcccggg tcgacccacg cgtccgagtt gataattatt gaatgtggat aatgggactg       60
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693

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ttgtatatac ttgtattcta taattttaaa ataagcataa actctcaaaa atgggagagg    120
aaacggcaac aagattttgg aagctggagg caaatatatt agtggtaact gatttaacca    180
acctgagagg gctgaatctt aggtcagcag tgggaaaggc aaactgcttt gctttacaga    240
tttcccaaat gtcttaggaa tttgtgacat caggaacctc tggaagtggg tgtataagga    300
tagaagcttt cattcaaagc ggtttaaaaa aaggccctaa atacctctt cagttccatg      360
tagccaggat gaaaactgac tcaaaatttt ttctctggaa agagtaaaat agaagtctgg    420
attgcactgg tagttgagtt gtagagctac taaatatggga ttaaataact gtgtgcattc    480
tggttgttct attactcaag gaataaaact aaagggcttg ccccaaacct aaagataatt    540
acaggagaaa aaaaaaaaac ccagccagtt acccttcagt gagcccacaa tcactatgct    600
ccatcccttc agtctccta tcacctttt tatttgtcac acttaaataa gagcaaaaac      660
agccaaggat tatcaggcat ctcaggaaag tctctaacat gaaagagaga gacaaaaaac    720
cattggctgg gcacggtggc tcacccctgt aatcccaaca ctttgggaag ctgaggtggc    780
cagatcactt gaggtcaaga gttcaagacc agcctggcca acatggtgaa accccgtctc    840
tactaaaaat acaaaaatta gccagccatg gtgacatgtg cctgtaatcc cagctacttg    900
ggatgctgag gcatgagaat cacttgaacc tgggaggcgg aggttgcagt gagccgagat    960
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aaaaaaaaaa aaaaaa                                                    1036
```

<210> 1183
<211> 849
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (844)
<223> n equals a,t,g, or c

<400> 1183
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attcctgact tcaagtgatc cacccgcctc agcctcccaa agtgctggga ttacaggcgt    120
gagcactgca cccggcctca cttatcatta ttaaactcta acatgtgttg atcacttaaa    180
actctcgagt tgtactgtgt gacatgtgat agctacctta tttcattact tcatttattc    240
ccttgaggct tggagactga tgtgtgaggg aggagtctga gggctcctgg gccctcgccc    300
atgggagctg ggtgcgtggc tgtcctgttg ttaggacaag ctgcaggaga gactgtgttt    360
ccttggccat gtcccgtggg gcccagcatg atgtcctgag tagcagaaag atgggtgagg    420
gatgggctgc ctggatgatg actggctgat gcatttctgc cctcagtttt caccatggcc    480
aggatctctt cagagtcatg attcaatgga atttatacca agtgtgccct gatttggggg    540
tgtttctcag atgatgtgta gtgcccccac tcagaggagc cagaagccaa agaaactcag    600
atacacttga ttctctaatt cattctctca caggaattgt cttctaaact gcaaatatta    660
aacagcgcag agaatggtct cacaagctca gaagggatct gggaggaaat gaactgctaa    720
gagggttatt ttcagctact ttcacttact gctttaaact gtgcttctat tgtttgaggt    780
ttttgcagtg agcacatacg acttatataa taaaaaaaat tccatttgga aacaaaaaa     840
aaanaaaaa                                                            849
```

<210> 1184
<211> 1759
<212> DNA
<213> Homo sapiens

<400> 1184
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ccacgcgtcc gctataatcc caacactttg ggaggcccag gcgggaggat cacttgagac     60
caagagttca tgaccagcct gggcaacata gtgagactca gcctctattt ttaattgaaa    120
aaaaaaaaaa aagcctgatg cagtttcatg ttaaataatc agtatttttt gtattattct    180
gtctctcttc atcttacaaa aaaagtagct ttgaaacaac taatatgctc ttttttcttt    240
gcttctgctt tcttcagctc ttccatgtct ataaagccaa ccccttctgc tcagctcact    300
agaacacctt ttccatgtta tgaaattaag tgttgccaca ttctagagtt gcaataaaac    360
caattgagat ctttaatcta aatttgttgt aattttgtcc tttgacactc tgtaaatacg    420
gttttataat ctgtgttttt tccccacttt atactataga catctttctt gttaataata    480
tatacttact aaatatgatg acatagaatt tcattgtatg ggctgtacca taatttacca    540
agccaaactc ctgttagaca tttagattta ttctagttct tagctgttaa cagtgtgcta    600
```

694

```
gaaatgctgt atgtgtgtgt aatttcacat atatataatc atttacttat attactagaa      660
tttattgtta aattctagac ctggaatttc caggtttaag agtatgcaca atttatattt      720
ttaaacacct tgataaattg tccttcaaaa gttgtatcaa tttgtagtct gcttacatgg      780
agaaaattac aacctgctgt ttttccactg atgtagtatt agctttcact gagaaaatga      840
attggatgtt ttcttttttt tcttcctaaa tctcatatgt ggtggaaaga tattttcttt      900
taaaaacaca ttctcagact gggtgcagtg tctcacgcct atgatcccag cactttggga      960
ggccgagatg ggtggatcat gaggtcagga gttcgagatc agcctgacca acgtggtgaa     1020
accccatttc tgctgagaat acaaagatta gccatgtgtg gtggtgcatg tctgtaatcc     1080
cagctactcg ggaggctgag gcaggagaat agcttgaacc tgggaggcag agtgaggcaa     1140
gatcatgcca ttgcactcca gcctgggcaa caagagcaaa attctgtctc aaaaaaaaag     1200
cggggggtat tttttagtgc agagctcccc aaagcctcta acatacttcc aaatagaatg     1260
acttaagcaa ctcagaagaa aagtttttca gaaagacaaa agcatttatt tgcaatagag     1320
gcaagagggc aacgggtttt cccatgctcc tgctcaatcc ctctcccaga tgaacagatg     1380
atgtcttgcc atccttaaac ttcattgcaa agaaactggt ttcatccaca gctcccttca     1440
cattcccacc caatcccttta gcttccattt tggaccatgg gacttgactc atagactggc     1500
tatcaacctg taacacagcc aggtataaaa ggatgacctg agcttgggca acgcagtgag     1560
actctgtctc tgcaaaaaaa aatttttaaaa attagccagg tgtggtggtg catgcctgta     1620
atctcagcta ctcaggagga tgaggtggga ggatcacttg aattcgggag gtcaaggctg     1680
caatgagctg tcattgcacc gctgcattcc agcctggatg atggggagag accctgcaaa     1740
agaaaaaaaa aaaaaaaaa                                                   1759


<210> 1185
<211> 2220
<212> DNA
<213> Homo sapiens

<400> 1185
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ccttcccttg ccacatcagt ggcctgggct tgcacttcta aggccaaaag cacaggcata      120
aatattttga ggtgtcactt taaagagaac atgcatacat ctctgttgcc accttaactt      180
tcctcctggc atgtgcccag gcagagttca gggcatacca caaatgcact cagcaatatt      240
cagggcctga ttttttggaag cctgcttgaa aactcgcctg taatttaaaa tagtgagacc      300
agaaattcca gaaagtaccc tagttttttgg gaacgcctga tggcctgcac atggactcaa      360
tcctgatttt caaatggcaa aagctggggt gggggcatt taaaacttgc ttttttaaatt      420
gtgtgcttac ttatactatc tggtgtttta tttgtttatt ttttctaaca atgtctcgaa      480
ggccatgagt cttttaggcaa aagctgcaat ttggaggttt aaagcaaaga tgataaacag      540
catctaatca tcccattaac attttaccac ttttctctct ttttaacccca aagatccaac      600
acagcaacaa tactaattga tatggaagag tcaggccgca aaggaggaga gagaggtaca      660
gatagagcaa acctttgatg taaggtcagg gtcaaaaatg ctgggggctag gctgcacagg      720
tgtaaagcct ggcctggtca cttacccacc tagtatgacc ttgaacaagt cacttagtgt      780
ctctaggtct cagcttcctc atccatagac gtggatgtga tagtaataga ctctgcctca      840
aagggctgta ggcagagtaa ataagctaat acatgtgaaa tgcttggaac agtgcctagt      900
aagtacatgg caagcacaag gcaagttagc ttggatcctc acccagtgct gcctcactta      960
attcactggc cctgtgtccc tgtttaacaa tctatacaca aaaagtaagt agaatggcct     1020
aaaaaggcaa actgcctcct caaaccaaca ggctaacaga gacagtgaga atggcactta     1080
tgggcatgca aagagccatc aacgttgatg ggtatacagc agatataatt atgcaatatt     1140
gccattagga tgccagaaag aaaaagcatg aataaattga aatgttaatg acttcaagtg     1200
ttcaaggaaa tattccattt attatggaaa acaaatgaaa ggcaagttaa cctgtcattt     1260
ctcctactca gagttagttc atcatgactt catgtacggt aggatcgaaa caatttatgg     1320
aaaatactac caaagaaatt aagataatgt caatgcatta catattgcca ctggctctga     1380
gtttctcttc ctaagctatc atccccaaag ctttgatagt tgtttgcaca agacagtttc     1440
agcaagaact cttcaaaagg accctacgcc caagttctgt cagagaagtg aagagtgtca     1500
tctggaggaa aggttcagtg ctggagagag cattctgctc agtcataaag cctgttaaag     1560
gaaggttaag aaggaagacc aggagtagca cagatggatt ctacagttct attcatctgc     1620
atttccagga catgttgact ggaccaccag gcatccagtt tcgacttgtt gggtcttgag     1680
gcttgttttc cttgtttgta aaatggggat aagaaaataa gaagacgaac aagcaggtca     1740
tggtgagaat taaatgagat aatagatgta gagtgttgga tgcagttcct agtattcagt     1800
attcagtaca cagtattcag gaaagagtgt caatatcatt aatattaata agatatgtaa     1860
aataatttat attattaata ttatcccaag cacttgagag tttccctgaa agataccaag     1920
aattctgagc aggggggctgg ttcacaacta taatcccagc actttgggag gctgaggcaa     1980
gcaaattgct tgagctcagg agttcaagac cagcctggcc aacatgacga aaccctgtct     2040
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                                    695

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ctacaaaaaa tacaaaaatt agccaggcat gatagtgtgc acctgtaatc ccagctactc    2100
gggtggctga gcatgagaat cgcttgaacc tgggaggcgg aggatgcagt gagccgagat    2160
cattccactg ccctccagcc ggggcgacaa agtgaggctc tgtctcaaaa aaaaaaaaaa    2220
```

```
<210> 1186
<211> 2702
<212> DNA
<213> Homo sapiens
```

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<400> 1186
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atttgtgtct tgtgacaatt atgtttata gacctacact agtgccaggt cactattgta    120
agatgttaaa atctcaagaa aatttcacag agctaaagaa atgatgtcaa attagtcaca    180
ttaagctata gtagaaggaa ttggacactt ctccagatat ttggcttcaa aggagtacct    240
ttacttacat gtgctttatg gtaagtacat tgaattttac tttaaatgca ttttactaca    300
aagcacaatt catttgtaat gcatatccat cttggattca atccaaggtg ctttagctat    360
cagtagtacc aaaggatctt tttacaaggc ttcctgtggt attgactctg agaataacac    420
atagtgaaga tctgtgggct tttaaaattg ttcacagcca atttaagaag acccctcatg    480
aagtctcagt tttcagtaca gtacatcatt cctcctcact aggagcactt tgatgtaaac    540
cagaatagct ttaaaaagac aaaaaggatc gtagatctga tttttaaatg gttggttgct    600
ctgacagatc tgaacacttt gcttcatgac tatttcgtca taaaggtata tgtttaaaat    660
ctgaatggca gtactagctc tatactttta atactgcttt gtatttttata tgtaaagtag    720
tattgctgac attttaaaaa aatacaaaat acaaaagaaa ccattagaaa ttaataactg    780
tggctcttcc agttgaaata ggaattggag agaaaggatt agaatatttt aattagggga    840
gtagattatt gtccaaaggc ttttatttag agaaacgggt aattaaaaca gcagctttag    900
aatagcttct tactgaatat gcaaaagaat aattccttgt tatttcctaa ttgatccaag    960
tctcataaat ttagcttttg tcataattcc ttaccgaaaa caactgaaat tgagagtcat   1020
aaatactgtg ggttagaata aaaaccagtt gccaaagcaa cactctactt agaagcacat   1080
gtacatacat ggacctcatt cagaagtcca tgttgtagca gttagaattt gagtatcagc   1140
catttcattg tagtaacaaa aattgaattg catttgtgc tcagttgttt attgtaattt   1200
tattttttgtt acattaatat tagttaagat atggtcactt gaattttttg tatttaagaa   1260
ttttctgttt taatgcatgt tatactttta tgtaggattc caaaccttcc ctctaaatgg   1320
gatttaaccc acatctgcga gatcagcgtt atgctaagag gaaatcactg aggccatatc   1380
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gtttgggtat gatcttaggt tttatggaga tgttttcaat agagattatt tttccctcac   1860
cctatttgtg aatatataaa ttaaagtaag acaatggagt aagtaagagg gtagatccaa   1920
acacagtatg tctaaattct agcactctac tggctgctta gaatacacca aacctggaag   1980
acctttccaa gagtaaaatc ccagtctgcc actatcaaaa ttgccacagt cactttttact   2040
acttgtgttc atagtagact cagcacttct ttttcactgg acctagtata actgagaaat   2100
aaataactgt gtgcaaaata ttggtatcat taaggaccca gagctgccca ttttctcttt   2160
ggtctaatag ggaagcaatt actgatagaa atgtgagatt aaaaatatggg tcctccctgc   2220
tgctccaaac aaatgcctaa acacagtatg tatctcagtc ctctgttccc agagattcca   2280
ccctagccca ggaaagaact ggcctgtgta agcaaaaccc aagtcatccc cctccagaaa   2340
tttctctggc agccaagcct gaccctaagg gttccacttt gctttaaaag ctaggagtgg   2400
cctctagagc caggaacaca ttaatacaac agttcaacct cagcaccaag tcaggtacga   2460
agcgcttgat acgtggaatt tttctctata tcaagtttaa atttctggaa atagactttg   2520
gttgctaatg acaattacag ttataccata gtctgtaatt tgagaaaagg tgaaatgtat   2580
ttaatatata tttagtttta ataaaaagat aaaattatta cagaaataat tgagagagag   2640
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aa                                                                  2702
```

```
<210> 1187
<211> 1785
<212> DNA
<213> Homo sapiens
```

<220>
<221> SITE
<222> (936)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1004)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1730)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1750)
<223> n equals a,t,g, or c

<400> 1187
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gacccacgcg tccgaaaaaa aaaaaaaaaa gagcagagaa aatgataaac aacttgcagg     120
ttgttgtgtg gtataatggt cattcattat tttctactct ttctggtaaa gagttggtgt     180
gtcatggaaa gtacctgttc tatgtgtgtg tgtctgtgtg tataattcgg tgtgaaaatt     240
aaagagaaaa aaacaataaa aaacccttttc ctatacttat gtgtaaatta ccatggtgtg     300
ctgcaaaaaa catatgtcaa ggtgatagaa ttattttgac tttcctgtac agttataaaa     360
tgactcagtg agtttggtta gatatcctcg ttctttgaat ctatatcctt gtctgcttat     420
gatgaaaaaa aagaaaaaaa aataatggcg agggtcttcc aaactctaaa gaatatgtca     480
actatgatac aagtagcagt tagccttata actaactgta aacactgtct gtgggtttta     540
agttttacct gagcattgga tattaacaga ccattagccc aactttcaaa aatatgaacc     600
ctatgaactt cacaactgaa gtcagatctg tatgcctgag agaggtaaaa tcatgtcatg     660
aaatcaaacg gtggctgatg cgcccaaatt ctggcctcat cctctaactg gaggacatct     720
ggcaggacag caactgggct gtgcctttt tcagtccagc aacatcttcc actcaaccca     780
cgccatttgg cagtttcccc attgccctg gcacctagcc ctccggtacc gggaactaaa     840
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tcacgcaggg ttaggaactc cggggggsgtg gcgtancgta acgcartgtt ggggaaactt     960
gcggstgtgg attgggggac cggaaaggga ggggtgggcc scangcgccg gacgtgacgt    1020
aagccggaag cgactttccg ccgagaaata aggggcgcgt gtttggaaat tgatagaaaa    1080
gataaaggga ccgagctgct gtcagcctgg cttactgatc tgcgtccgtt tcaccacgga    1140
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gaaaggaagt ttgaaacttt gttaaagcac ctgtcacatc ctccatcatt tacaactgtc    1620
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tttcagaagt ttaatgggtt aagggttccc attttttcaa catccagacn tcaagatggg    1740
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```

<210> 1188
<211> 1162
<212> DNA
<213> Homo sapiens

<400> 1188
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tcggatcaag ttgagactag ctggtacagt taagcctaag tttcttttg tttctttcct     120
```

697

```
tgcccctctc attttttctag actttgagaa atttacagtt tggtagttaa ggactatgtt    180
tgcaagccta attcaaagct tttgggggaat gagttgtttt gttgtgcaaa agacaaatag    240
gaagtatatg actgtatgcc ttataggaat agaaggcagc agatagtata gctattttcc    300
atatgggggaa actgaggcat gggagggtta cttaatgaag tccctgatct ctcaagaggc    360
aaacattaaa aaaaaaaatt agagaaagac gtcattattt gaaaatagag gtgagccctc    420
ctaaagctgg tcttgagctg tttcacgtgt tagtgctggc aggaggtaac caggacggcc    480
taaatcttgc tttctgaaac tcgttcatca ggcatttcct gagtggatgt gagtactgag    540
atacatcatc agttctccca tgtgccacgt cactgctgac acgtccttag aaatgtctga    600
tgtggtgttg gctgatcttg gtattgatca gttgtgaaag tggaagaggc atgagaagag    660
acacctcttg gggcacgcta aaatgacata tcgtgggggt ccctggacaa cttttttatta    720
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catggtaaaa ccccatctct acaaaaaata caaaaaatta accaagcgtg gtggagggca   1020
cttgtagtcc cagctgctcg ggaggttgag gtgggaggat cacttgagcg tgggaggttg   1080
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tcaaaaaaaa aaaaaaaaa aa                                            1162
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<210> 1189
<211> 1024
<212> DNA
<213> Homo sapiens

<400> 1189

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tcgacccacg cggtccgctg acttccattt cccccgaatt gaagagcaat tagaagttgt     60
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ttctggaaac caaaatggag gaaatgatga taagactaag aatgctgaga ggaactattt    180
aaatgtttta cctgggggaat tttatattac acggcattct aatctctcag aaatccatgt    240
tgctttccat ctctgtgtgg atgaccatgt gaaatcggga aacatcactg ctcgtgatcc    300
tgccattatg ggactccgaa atatactcaa agtttgctgt acccatgaca tcacaacaat    360
aagcattcct ctcttgctgg tacatgatat gtcagaggaa atgactatac cctggtgctt    420
aaggagagcg gaacttgtgt tcaagtgtgt caaaggtttc atgatggaaa tggcttcatg    480
ggatggagga atttctagga cagtgcaatt tctagtacca cagagtattt ctgaagaaat    540
gtttttatcaa cttagtaaca tgcttcccca gatcttccga gtatcatcaa cactcactct    600
gacatccaag cactaaaccc ttatagattg acatgctggc agaagatgat tgttaaactc    660
tccaggaact tgtgctatgc tgggaatctg tcaagcaaaa gatgcccaga aagagaactt    720
gcagctcaat ccacaaatca agatacatgt gtgtgaaacc attccaaaaa tttatatact    780
gcacaaactg gtgatcaacc cctaacttaa acacttaaag tctctttatg aatttctctt    840
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tggacacttg ggaaaggaaa cttgattata tttacatgga ggcatttgac tttttcaaga    960
ggcttgactc gtctcaggtg caatccttaa ttaaacatac aaacaaaaaa aaaaaaaaa   1020
aaaa                                                               1024
```

<210> 1190
<211> 2191
<212> DNA
<213> Homo sapiens

<400> 1190

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tcacttgatt ctggaaacca aaatggagga aatgatgata agactaagaa tgctgagagg    180
aactatttaa atgttttacc tgggggaattt tatattacac ggcattctaa tctctcagaa    240
atccatgttg ctttccatct ctgtgtggat gaccatgtga aatcgggaaa catcactgct    300
cgtgatcctg ccattatggg actccgaaat atactcaaag tttgctgtac ccatgacatc    360
acaacaataa gcattcctct cttgctggta catgatatgt cagaggaaat gactataccc    420
tggtgcttaa ggagagcgga acttgtgttc aagtgtgtca aaggtttcat gatggaaatg    480
gcttcatggg atggaggaat ttctaggaca gtgcaatttc tagtaccaca gagtatttct    540
gaagaaatgt tttatcaact tagtaacatg cttccccaga tcttccgagt atcatcaaca    600
ctcactctga catccaagca ctaaacccct atagattgac atgctggcag aagatgattg    660
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```
ttaaactctc caggaacttg tgctatgctg ggaatctgtc aagcaaaaga tgcccagaaa    720
gagaacttgc agctcaatcc acaaatcaag atacatgtgt gtgaaaccat tccaaaaatt    780
tatatactgc acaaactggt gatcaacccc taacttaaac acttaaagtc tctttatgaa    840
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atcacacatg gacacttggg aaaggaaact tgattatatt tacatggagg catttgactt    960
tttcaagagg cttgactcgt ctcaggtgca atccttaatt aaacatacaa acaaaatttt   1020
ccttttactt tctttgccaa aacaaaatgt aaaagcactg aaatatacat tgcaagtaca   1080
aatttcctgt gaaaatcttt ttatagaaac acmaatgtat aagacmaatg tgctkgtyct   1140
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caaggaagat catttctaca tttctgtcct ccctgcgttc tcagcttgct taaccattcc   1440
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tccttttcca ttgttttttcc ttatggtact actttctcag gtgctacata tcatatattt   1560
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caaaagcaca caggtgttta gaaaagcaat agtttcatca attccaagtt atgtggatat   1680
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tgacaagaaa caaaacgccc ttcattaata tgcctcagtg taataactat tatagaaact   1800
gttggcaagc agagtgcttt cctataacag aatgtgtctt aattttctac tcgagggaaa   1860
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cattagacac taaaactctc caaattattt gtcagggagc ctggcgattc tgccaagaag   1980
gcaggtgttt tgcccttaga gcctatacag ttctcttgga gaaattgtct ttcaggcacc   2040
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gagttgggca gcagcattca acaaacatcc gtgaatgaaa ctttgctcct ccattccgat   2160
atctgggctg cactgatctc gtgccgaatt c                                   2191


<210> 1191
<211> 1103
<212> DNA
<213> Homo sapiens

<400> 1191
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caaaaaatta tgtgaatagt aggggaattc tttctgtacc cttgagttat tttatcactg    120
ttgtgwttac accttataag amaattccac tctgagaatg agcacaagga acagatagga    180
aatgtgcagc tggtgctgat gtgtagccct gcgcccttca aatccatgtg tgcaggcagt    240
cacttcctca gtcattagct tttcatctga aacaacaaag ctagtggtag gcagcttctg    300
agatggttcc cagtgaagcc tgcccgctgg tgtgcactct tgtttaacct cctgtccttg    360
ggtgtgagct gcacttagta acctgcttct aaggagtaga acatggggga agggagagag    420
cacacctgag gtttggtggc agaaaggctc tggcttctgt ctcctcgccc actcttaact    480
ttcatgcttt cctgctcaga aggtgaggtg ttctttggaa aggcccatgt gacaagaagc    540
agaactttcc agccgacagc tamcatggaa ctgaggccct cattccaacg gcctccaact    600
gaatcctgcc aacaagacat gagtttggaa ggggatccac cccagtggaa ctcctgagat    660
gattgcagcc ttgtgagaga caaaccaaga tgtttgttta agtgctaaac gtggggataa    720
ttttttatgca gttacagata actaatacaa agctagaaaa agaaaaaggc ataatacaaa   780
tttcagcatc ttaatgagtc tgccagcatc tgaagaactg aaataaggcg aactggtctt    840
cctcccgcat gagcacctgt cagctatctt agtcttacct taaataaaaa cacttaacca   900
aatacattat ctctctcaag gacagcaaaa gatattgaaa tttgatgatt ctgtatttga    960
aatgtaaatc agattacaat taaactctaa ctcttgaata ctgtcccttt taagtcacca   1020
aatctccttt gagtaagatg aaattatcta aaaatgaata aaggataaaa tttttaaaaa   1080
aaaaaaaaaa aaagggcggc cgc                                           1103


<210> 1192
<211> 1658
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (778)
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699

<400> 1192

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ggctcatgaa tgcagaacaa tcaccgcacc catggctgag cgtacccact ggtagtggcc   180
tggagtttcc ctaggagag gctccaagag gcatatggct gtccctctgc cactgccaca   240
gcaacagttc tatccctact tccctcagcc tggggaagaa acaaagagcc tgaggcctat   300
accaagttta cagcacacca cagtcaccat gtggagaaga gaccaatctc tcctcctagt   360
gagccttcaa ctgccttttt ccccagtaag tggaacccca cgcttcatgc cagcagtgca   420
gccatgccaa ccccacagac tgaacactcc cagtaatagc tgctctgtgt ttcttggggg   480
tggagccccc aggggcaact aaaagcctgt ctgccattgc ctctgatgtg gtactacccc   540
tactactctc agactaacaa aggagcaaga aaataaatgc cttatccaca cttccaacaa   600
gctgcagtca acccaaggag acgaggccag tctgtgtccc atgggtcctg cccatccccc   660
ctgctcatca ccaagcaggg aacccacaac ttgggcacag agcacacact ctctatcctt   720
ggctgattgc actgtgaaat tgctgacctg catctctctg gggtggagcc cccagganac   780
aagcaaaagc ccttggccac aaccattact aaggtccctt tctctgtcct acttagggag   840
gaaacataaa ccatgagatc acctcaaagc tgtagtgggc arcctgggag tgctaaactg   900
caatgtacag ccaacattca tgtgggagar gagcctacac tttgagagct ttgacaggga   960
gcatggttgc aactgtgagg aaatataggg gagccacaag aacttaccag ctgaccacta  1020
cacctaagtg tcacctacag gataacattc gaaagcttca acaccaaaaa tatcttactg  1080
acatacaccc ctgcgaaacc aaagatgaga agtcagctac aaataaaggc ctgcacgaag  1140
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agttaaagga acacctaaac mcagaagtga gaaagaatga atgccagaat tccagtamct  1260
caaatgamcg gagtgtctta tgtccttcaa acgaccacac tagatctcca acaagggttc  1320
ttaaccaggc tgaattggct gaaatgacag aaatggaatt cagaatatga ctaggaatga  1380
agatcattga gattcaggag aatggcaaaa cccaattcar ggaaactaag agtcacaatt  1440
aaataataca ggatctgaca tatggaatag ccggtataaa aaagaaccta actgatttga  1500
tagagctgaa aaacacatta caagaatttc acaatgcaat tgcagggatt aacagcaaaa  1560
tagaccaagc tgaggaaaga aactcagaaa ttgaagactg gctctcttaa ataagacagt  1620
cagacaaaaa taaagaaaaa aaaaaaaaa gggcggcc                           1658
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<210> 1193
<211> 1167
<212> DNA
<213> Homo sapiens

<400> 1193

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ccacaacgga ctgggtcgct atgtgcagca gctgcagcgt ctgagcttca gcgtcaaccg   180
cgacggcgcc tcgtctcgcg cgccaggga gttcgtggag cgggaggtga tcgacttcgc   240
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cccgctatcc tccttctcgc ttggtcgcac cggccagctt ccacccactc tcacccctct   420
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gcccttccac accgacaacc ctagcatcca gggccagtgg caccccttca ccaacaagcc   600
gaccacgttc cgcgggctac gcccccgaga ggttcaggat cctgccccag cccaggtaca   660
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tgatctcaaa acacagtgag aggtctgaag gctggcttct gaagaatccc tgatgtctta  1020
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aaaaaaaaaa aaaaaaaaa aaaaaaa                                        1167
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<210> 1194
<211> 1671

<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1050)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1478)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1541)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1632)
<223> n equals a,t,g, or c

<400> 1194

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tcatccctgg gatcacccca ggccatgctc tctctgctca gcctgtgcct tcttaatcct     180
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tggctattat ttaatccact acattttat agtaaaagtt aacatagttc taattataca     360
ccataggttc tgtctgtcct tctcaacaaa atcttttttt tttttttttt ttcaaacagg     420
gtctcgcttc gttatccagg ctggagtgca gtggtgtaat aatagctcac tgcagccttg     480
aactcctggg cacaagtgat cctcctgcct cagtcatgca agaaagtacc tagaactaca     540
gatgtgcgct accgtgccca gctaattttt aatttttttt ttctggagca gggtcttgct     600
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aaagtgttag aaacacaggc atgagccatt gtgtctagcc aacaaatttt tttaatgacc     720
ctaattaaac atgttcaatt ttttatgcca aaagaaaata gatgtactat agtttagaat     780
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ttacaacgtc gtgactggga aaaccctggc gttacccaac ttaatcgcct tggcagcaca    1620
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<210> 1195
<211> 506
<212> DNA
<213> Homo sapiens

<400> 1195

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ttttcccttt ctctggtctc cgtgcagccc ctgccctccc tcgggtgctg ctggcctcaa     120
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701

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aggaggaact cgtgggggga gggtgtgatt tgcagacctg ggtctctgct ctgctctggg      180
ggtggggctt gctttcacag agaccctcct tccctctcac ccctcctctc ccggcctcgc      240
caggagtctt ggctgttggc agctcagagg tgggggaggc ctgtggtgtg aggtgccctg      300
cacctgctcc tgctcctgtc accccttcct gctgcctcct ccatgcccaa ggaacaccca      360
tggtgcagtc ctcaggcaag gccaggacgg ggctgaggcc ctgcgtggag atgctgcacc      420
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tctcaggtca aaaaaaaaaa aaaaaa                                          506
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<210> 1196
<211> 1721
<212> DNA
<213> Homo sapiens

<400> 1196
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cggccctgac atgggcgcca gcgggtccaa agctcggggc ctgtggccct tcgcctcggc      180
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mggctgtgcc cccttcgta ttcacgcgcc gsggctctat gttctatgat gaggatgggg      300
atctggctca cgagttctat gaggagacaa tcgtcaccaa gaacgggcag aagcgggcca      360
agctgaggcg agtgcataag aatctgattc ctcagggcat cgtgaagctg gatcaccccc      420
gcatccacgt ggatttccct gtgatcctct atgaggtgtg accctgggag gtggcagaca      480
gaagcacccc ctgccccggc aagaaactcc caggctcaat caaggtgtgg cttccattga      540
ggagcccagg ctggggccac aaccctgaat aaactctgtt ggcccataac cttcagctgt      600
gagcgggtcg gtcccacagt attggttggg tgttggtttg tgtgtggaca agaggtggtt      660
ggtgggtggt gaaggctaat ggcagagtta gcaccccact ctcccaagcc acccctgcaa      720
gcagcacagc agggcatata ccagtcagga atgcccgtta cctggttcct tgcctggtct      780
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cctgtgttgg acagaggctg ggggcagtgc cagcctgatt cttccgacct acctgccatt     1020
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gcggatgctt gtgcctatgg ggagttactc caacccacct attctgtcta atctccatgg     1260
ctttgcacca aatcctccac ccctccaatt gggagggggac tgttcaccac cttgtggtaa     1320
gggacaacac cctaaggctg gtgccagtag ttatgagtag cctaccaccc cctcccttac     1380
agtaacccc accccttcag gatcagtcaa gggaaagcac tagaacccct gggtagggaa     1440
agaaaggagg gaaaaaccat aaaaggaata cttataatgt gaaggtttgt aaatagtcca     1500
tgatgatgtc gtggcagagt ctgatttcta tatagaggtg actttttttt taagtactgt     1560
gcaagctctg tgcttctata atgtgggaaa tggcttgggg aggatggccc ctagcttagg     1620
aagactgttg tgttatttgt tcaatttcaa taaaatgatt tgtagatcct gcaaaaaaaa     1680
aaaaaaaaa aaaaaagggc ggccgctcgc gatctagaac c                        1721
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<210> 1197
<211> 1994
<212> DNA
<213> Homo sapiens

<400> 1197
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aaggtcacac agctcacaag ggacagatcc agaggctggg ctcctgttgg aggagccaca      180
caccctgagc tgtgcagcgt agaccagctc ttgcacagga ttagtgctca gtaaatggcg      240
atgtgggttg ttgctgttat tgcaagcagt gccactctgg gtttagctaa aataactcat      300
gatctccaaa gcaccctcca gctctgattg taggagggg gctgtcagga gctccatgca      360
cacaatatgg cagaggagct ttgggagact gttttgactg gcatctcctt ttccagcacg      420
ttgactggca gctgtttcaa ggtctcttga aagagtccct actccctccc taagctccat      480
tctctcctgg gtttggatat gctgagagag ggtagggaaa actgaaagga acattgatca      540
agtggactgg atctgttggc aggcaatgga gatgtcaccc ttctcaaagt aaatcactgc      600
aggtcaccat tgagacggga cacaccccaa atgaggcatc tgagacttct ctgccttggg      660
```
```
                                     702
```

```
gtgaaccagg cgcctcccag tgaaacccct ccctgcatca ccctctgccc ctctttgtga    720
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tgctacccty ctgccttctc ctccctccct ttccttgggc tcgcatccct ttgatgtttt    840
tacaagcctt ttttyaaacy tgcactcact ggtgggtgaa tcgcctccct ctccttggga    900
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gagtgctttg acaagacgga agatcactgt aggtgaagtt ctcctgtgct ccacagccac   1200
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tatgtgcatc ttcccaactt ctggacatcc tcactcctcc tctgtccaat gtaaatcaga   1860
atagtgggcc gggcgcagtg gcgcacgcct gtaatcccag cactttgtca ggctgaggca   1920
gaagaatcac ttgagccagg agttggaaac cagcctgggc aatacagtga gaccctgatt   1980
ctacaaaaaa aaaa                                                      1994
```

<210> 1198
<211> 443
<212> DNA
<213> Homo sapiens

<400> 1198
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ggcacgagaa acggtagtat catggagaga tcataataaa ttcttagtat taaaagtggt     60
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gttatcttcc aaatgttgtt ttttccccac agccccctta acattgttct ctatgcactt    180
ctcaatacat tttcatttgt ttctcaagcc tctttgtgga tgactcctaa atataacttc    240
ttccactagc tctagatccg tatttccaat aaaatcccct acctgaatat tcaagttaaa    300
catgtccaga atacttactg attttattgt taatagccac tattctgttg tctggaatta    360
aaacctgtat aactaatttg catcccttta tcttcttagt caataaaacc tacaatcctc    420
tttctaaaaa aaaaaaaaaa aaa                                            443
```

<210> 1199
<211> 1560
<212> DNA
<213> Homo sapiens

<400> 1199
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tgtcgcctgg ccgctgcctc gcccgcctga ggcctcctag caggcagcct gggtgtgagt    180
tgagcctctc tcttttccct ctggtgggaa agtggccttt ccctcaacac ctgctccccg    240
gccccagagg aacccacctg ttttggagct cagcttggcc cagcgtttcc ttggggaagg    300
gaaaggaggg ctggacagca ctgatccggg caggcagcgt gtgcagcagt ggccagccag    360
agtgccaaag atgcacgggg atgtggtgtg tggctccggg ccctcgacat ctctgctttg    420
ggggattttt accttgtctg cacacttgtc aggggagagg ggacagcaag gtgggaagtt    480
gaagagcttt gaggctcagc akcatgtytg tggcattcgg tggacaccat ggccttgggc    540
ggctggacag gtttttgtga tgtgagggac acgcatgggg cacatggtaa gcttggcaag    600
ggctccagga acgctgacga aaggttttag gaccccacc cccatgcctg taccaaggct     660
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ccctggccac cgcaagggac tctttgcttg tcagggcttg caaaaaccaa ccttcgagaa    780
agaaaaggga actcttcacg ttgaatgttg actttgtgtg tatgcgtgtg tgtgtgtgtg    840
tgtgcacgcg cgcgtgtgcg tgttgacttc atggaatttt gttttgtgaa attcccctcc    900
aatcgtgtca gaatttacct ccatgcccca gtcacactgt tggttctgcg ctctgaacct    960
```

703

```
gggtgtagcc atttgaagga ctctcttctg cgtttcctaa cagttatttg gtggtctcaa   1020
gagttgaggt tgtggagggt tgggagaaac tgaagttcta tacatttcca tagagtttac   1080
atcctgcagt taaaaggcag ggagggctca gcccgggccc cacagctcca ggccatcccc   1140
tacgggctgc ccacagtgcc cccttttctc tagccgaatc tttttcgaac agcccgggaa   1200
aggaaaacgg attcacttgc tgattttgtt cacggcggaa gcaccatgtt ccgttccttt   1260
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gcagggctcc tttgaagaga tggttccacc tcgtggtctg aagaacaaac cagagaagag   1380
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ctgctgtcaa gaagcacgtt tccaccagct gtattcaaca ctacaatgca ttttttaaac   1500
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```

<210> 1200
<211> 463
<212> DNA
<213> Homo sapiens

<400> 1200
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ggcacgagct ggtggcgtgt tagtttctgc ccagttctac cccctcatgt gcttcttctg    60
aatactgaat gtgactgttg aaagctggta gaattcatcc ctcttactgt agataacact   120
gcaaatcttg gaattttgtt ttttgctgtt tccagatgta tctataaata tctatacatt   180
atatgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt acatcgggtc ctcccatgtg   240
tggtgttctt ctggaggttg tctctttggt caaggtgaac ttttaatgtt tattattttc   300
ttctccgcac aaagtaaaga gcctaatttt gtgtattctg gtggctgctg tcatgagatg   360
ataaaatgta aaacaaaact ctagtcaacg tagaaagagt taactgtgct gaaaaactaa   420
taaagaacct aagaagaaaa aaaaaaaaaa aaaaaaaaaa aaa                      463
```

<210> 1201
<211> 477
<212> DNA
<213> Homo sapiens

<400> 1201
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cggcacgaga attacaccac tttagaccct atgtgtagca ggtcacaact tacccttgtg    60
tgtttagatg tgtatgaaat acctgtatac gttagtgaaa gctgtttact gtaacgggga   120
aaaccagatt ctttgcatct gggccctcta ctgattgtta aaggagttcc tgtcacctgc   180
tccccccacc cccgcatgcg tctgtccact tggctaactt ttaatatgtg tattttaca   240
ttatgtatat tcttaactgg actgtctcgt ttagactgta tacatcatat ctgacattat   300
tgtaactacc gtgtgatcag taagattcct gtaagaaata ctgctttta agaaaaaaaa   360
taacatgctg aggggtgacc tatatcccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   420
aaaatgaaaa aaaaaaaaaa aatagaaaca aaaaaaaaaa atttctaggg ggggccc      477
```

<210> 1202
<211> 687
<212> DNA
<213> Homo sapiens

<400> 1202
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gctctgaagc ctgctggaaa cttggtggca tccaacctgc ctcattcggc ctgaccggta   120
gaggcaggtg gcctgtggac agaagtaatc ctctttctgc tcaccccagg cagacacaac   180
tgcctatgtt cccccgatga gaggaaacag gctgagagaa gaaaaatgac tgctccagga   240
ttataccaca gtggagagcg ggtcacagga catgatgcag ggtccaggtt tctgttttga   300
tcaagtctta catgcccatt cagcttctag gcccccctca cctccctgcc ctcattcaca   360
agtggccctg agacacgtga cacacctaac tagcattggc agaggagagt ctacactctc   420
ttcctcattc agggaagatg ctttaagaaa tcctgcctct gtgcagcaga ggagctggag   540
gcagctcccc aggcatccct ccccaaataa aggcttatgt actggtgaaa aaaaaaaaa   600
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   660
aaaaaaaaaa aaaaaaaaaa aaaaaaa                                       687
```

<210> 1203
```

<211> 1877
<212> DNA
<213> Homo sapiens

<400> 1203
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gaaggacagg aagcagtggg cattcaagac tcgctggcct ttttttccatt ttctcatgct     120
ttctttggca cttgactgct acaggttttt aacttcctga actgtaccgt ccatcatgga     180
aggctctcct cacttactaa ggctaaaaac acaggctcca tagcctcttc attttatcac     240
actaatggtc gaaaggttct tatcctattt tgcatttgtt tcttgagggg aacttgagaa     300
gcaaaactct ggagccatgc tccccacgtg caaatctgag ctctaccact ccctgctctg     360
tgaccatggg caagtcactt agcacgctat gcctcagatt catttttaaa attaggatgg     420
taatactagt atcttcacaa gattttatga ggattaaatt agctgttggg cactgttgtg     480
gttaatttca ggtgtcaact tggctaagct aagtgatacc cagatagctg gtaaggcatt     540
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tgtattttaa aagtgcataa ctcgtttgt ttaacgggtt tatagctgga ggggaatttg     960
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aatgggagga cataaatttt gagaaacgg ggcgaatgct atagatggaa tattttgtt     1140
cctccaaaat tcgtatgtta aaacctaatc cccaatgtga tagtgtttgg aggtggagtc    1200
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tgttggaaat cttcccttg cataactgga aaacaaatct atgagttttt cagcaaaagt    1800
ggagacataa aaaaatcatg cgggcctaaa taaattaaaa atcaattaaa ggcaaaaaaa    1860
aaaaaaaaaa aaaaaaa                                                    1877
```

<210> 1204
<211> 782
<212> DNA
<213> Homo sapiens

<400> 1204
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agctgattct aaccttagaa taattttttgc tttcatcaat cttgtcctct gattatcaaa     180
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tgtaattact cagctcctga aattaaagaa atttaatcag ttttagtcat cttgtcttgg     360
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tttaaacaca tgaaataatt ttttaaaaag ctttctgggt tgggcgcagt agctcatgcc     480
tgtaatccca gcacttgggg aggccgaggc gggtggatca cttgaagtca ggagtttgag     540
accagcctgg ccaacatggt gaaaccctgt ctccactaaa aataaaaaaa aattagctgg     600
gcgtggtggt gcaccttgt atttccagct actttgggag gctgaggcag gagaattgct     660
tgaactcagg aggcactctc atgaggcgga ggttgcagtg agctgaaatt gcgccactgc     720
actccagcct gggcgacaga gtgaaactcc atctcagaaa aaaaaaaaa aaaaactcg     780
ag                                                                     782
```

<210> 1205
<211> 1003
```

705

<212> DNA
<213> Homo sapiens

<400> 1205
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agaaagctaa ctcctgttga gtgcctgtta tgttctcggg acagtgttag ggaaatcaga   120
ggaattgttt tatttaaagc tgtccagtcc tgcaagtagg tataattggc ctcatttaat   180
agaccagaaa atggaggcac cggagcctaa caattttctc ggccccacac agctggtaag   240
tgatgaagcc ggaattcaaa tctgggtcat tctgactgca gagccaatgc gattttatg   300
gtgccagcct gttgcctccg tgtggggctc ataacttact ccacagcggt gtcttattca   360
agttcgtcca gaagcagatc ctgagataga ctacaagtag tttatttagg aagcctggga   420
aacatcagtc aggcagtcag gaaatgagac agggaatggg aggcagcccc tgaaaaagtg   480
tgttatcaat tcaactacca ctgtaagcta ttagagcttg ttcacactgg ggaggctctg   540
ggaaccagtg gagtgcatgt acctctgaat tttcccatct gaggaaaaat ccgagggagc   600
caaggtattt atacaccaat tcctgagagt agttaactga gggctacttc tgggaggtgg   660
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agcagcacaa gaaagtcctc agcagagaaa ttcaggtgct ggcagttgga agcaagccac   780
tgtgctctga aatggtaagg acaaaggagt gggagggatg ccgaaagcac ctgctatggt   840
ggttttaaga attagaaaca ggccgagcat ggtggctcac acctgtaatc ctagcacttt   900
gagaggccaa gacaggcaga ttgattgagc ccagaagttt gacactagcc tgggcaacat   960
ggcaaaaccc catctctaca aaaaaaaaaa aaaaaaactc gag   1003
```

<210> 1206
<211> 1692
<212> DNA
<213> Homo sapiens

<400> 1206
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ggcacgagct gccgccaccc agctctcgcg gcagcagtcc ccagagagac ctgttttcac   60
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gtaccctcca aatagcaaat gtacttggaa aatcacagtt cccgaaggaa aagtagtcgt   180
tctcaatttc cgattcatag acctcgagag tgacaacctg tgccgctatg actttgtgga   240
tgtgtacaat ggccatgcca atggccagcg cattggccgc ttctgtggca ctttccggcc   300
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ccgggattac cctgcaggag tcacttgtgt gtggcacatt gtagccccaa agaatcagct   540
tatagaatta aagtttgaga agtttgatgt ggagcgagat aactactgcc gatatgatta   600
tgtggctgtg tttaatggcg gggaagtcaa cgatgctaga agaattggaa agtattgtgg   660
tgatagtcca cctgcgccaa ttgtgtctga gagaaatgaa cttcttattc agttttttatc   720
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tacatctctg taaaaggata ttttagaatt gagttgtgtg aagatgtcaa aaaaagattt   1560
tagaagtgca atatttatag tgttatttgt ttcaccttca agcctttgcc ctgaggtgtt   1620
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aaaaaaaaaa aa   1692
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<210> 1207
<211> 1274
<212> DNA

&lt;400&gt; 1207

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tgtctctctc tctgtttctc tttttgtctg tcttttctat ctctcacctt catttgggga     180
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aaaaaaaact cgag                                                      1274
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<210> 1208
<211> 1601
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> n equals a,t,g, or c

<400> 1208

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aaggaagaga antagaatca gaagttagga catctattgc ttgatgcttc tgggatgggt      60
aagacgtagt tctggtgata gaagttgaag ctgcagcata atgagagatg aaagagaaac     120
tgctcttctg gtgattttaa ccctagggat gtagctactg ggacaggagg aagtgaggga     180
cccagtgctg cagggtccct gttgtcacat atgtcaatcc tactttaaag tcaaataatg     240
gattctggct gataaagcct atcagaatta tggtgttgat acgaaagtgt cacatagcca     300
ccaaaatgtg ttctctactt tcttgctttg ctctgattag ctaagtcttg gtcacatggc     360
tttatagcac tgggaaaacc aggatctggt cttttatagg gtaggaagtg agccctatct     420
tttgtgtaga tttgtggcgg ggagtttccc aagcatggga aatgggctca gatgatgtgg     480
ttataaaatg tgaatgtcca ttaaaaggca gtcagtgttg gctactctaa gccttcaaat     540
tgttgctttt cccttcaac agggaccaag gggagatact ggaaacctct gagcttcagc     600
tgttggtttt tgggttttgt ttttgtttta ttgagataca gttcacttaa ctatacagtt     660
tacccatttta aggtatacag tgttttttag taatttacag aattgtgcaa ctattmcaat     720
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tcagtctcct cagccctagg caaccactca tctactttct gtctttatag atttgcctat     840
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tggtgggggc tgactactta gtcttgacaa gccaaggtcc caacccagca gtagaaatat     960
aaggagtcac ggctgtgagg atggcctcac aatgggctca gggtagtgaa cttctgtccc    1020
ctaagttatc tcagaaatga ggccaactct ctgccctcta gaatggatgg ccctgaggga    1080
gagaaaggtt catgtccttc ctggctggtg acagaaggct ggactgtgcc tgaaatcaaa    1140
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gtgctgaaga gggcaacaca ggagctgcac tgcagatggc gacatgcagg gtttcaaggc    1260
caaagctggt gtgttcttcc cttaagaatt gctgtaggct aggtgaggtg gctcacgcct    1320
gtaatcccag cactttggga ggctgaggtg gcggatcac ctgaggtcgg gagttcgaaa     1380
ccagcctgac caacatggag camctctgtc tctactaaaa atacaaaatt agccgggtgt    1440
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```
ggtggcgcat gcctgtaatc ccagctactc gggaggctga ggcaggagaa ttgcttgaac      1500
cccggaggta gaggttgcag tgagccgaga tcacaccatt gcactgcagc ctgggcaaca      1560
aaagcgaaac tccatctaaa aaaaaaaaa aaaaactcga g                            1601
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<210> 1209
<211> 766
<212> DNA
<213> Homo sapiens

<400> 1209
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ggcacgagtc catgagaagc acccgggcaa acttgctggc tatatatcca gcctgctcac        60
cctgacaggc tttgctacag ctatggctgc tgttgtcctc tgcgtgaata gcttcatctg       120
gcaaactgaa cccttttat acatcgacac tgtgtgtgat cgctcagacc ctgtcttccc        180
taccactggg tacagatgga tgcggcgaag tcaagagaac caatggcaga aggaggagtg       240
tagagcttac atgcagatgc tgaggaagtt gttcacagca atccgtgccc tgttcctggc       300
tgtctgtgtc ttgaaggtca ttgtgtcctt ggttccttgg gagtaggtct cgaaacttg        360
tgtggccaga gctcccagcc cctgaatgag gaaggatcag agaagaggct actgggggag       420
aattcagtgc ccccttcacc ctctagggag cagacctcca ctgccattgt cctgtgagcc       480
gccaaagacc ccacggggtg cccgcatgtc cctgtctagg gcagcccagg gcccccactc       540
ctggctcctc acacttgcct cccctatggc cgctctccag accctcctcc tttcttctcc       600
ccacatccgc acctgctgtt cccactctgg ggttctcaag tccatgaaca gatattgttg       660
cattttccac aatgctgatt aaacataata aacaatccag aaaagcagtt ttgcccagaa       720
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa                       766
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<210> 1210
<211> 3237
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (32)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3237)
<223> n equals a,t,g, or c

<400> 1210
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ggagtatata cacgtataga atctgtacgc gttgaacaac ttggttcaag atggtggggg       120
cattttaga gcggcaataa ttgaaaaaaa aggcgaactc tgccttggag aggtagatga       180
taagaaataa aaaggtgttt ataactattt tgtattataa agtgggcctt agagatagsa       240
agaagaatga tggattcctt ttggatcaat cagaaaggaa acacgaaaga aaagtcagga       300
aggtagagag agaaaaaggg agggaaggag aaagaatggg aataaaataa ggaggtaaga       360
gatactattt ttgctgagca accagtgtgt ttcaggatga tacaaagaaa aatatagaat       420
agaaataagt gcaggcttgg aatcagctac aaatcctaaa gatggggtgt gtgtggatgt       480
gtgtgtgtgt gtgtgtacac cattgtgtgt ttgtaaaatg tgtatgttca tgagtaaggg       540
tgtgtgtgtg tgtgtattaa aattccagag tgaccgtggc acttgggtgt acaggtaatt       600
cctccagagc tgtttgctgg cttcaggagt ggagtgagaa tttctttttt atgaaaaggg       660
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708

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atataaaggc accgagctga tgcagtattt gtaatattaa gttgacctaa caaggtattt    720
gcatgagtca caattacaaa gttttgagcg gttttgtaat ttgacattta ggaaagtctc    780
ctatttattc tcatacttta cattcatgct tagtatacta tagaggatgc cagctttaat    840
ctttctgtca tttaaagcaa tatgataagg gtattcaata attgggtgcc ctaaatttct    900
ggatgagaaa attttcaatt ctggccatga gaaagaaaaa aaaataaaca gccttctttt    960
ttttccttt gttttaaaac tgtggttttt taaaaaagca ataattaact cagacctcac   1020
taaaaatcat ttttgttttt atattgttat gtcataagct ctattatgtt attctaacaa   1080
gtagcaattt cacaaaattt gtatgtagat gttaacgcac atttcctttg cttcttttat   1140
tagactagtg ttgactttgg gggggacat ttattcacaa atgagaagta ggcacaaagt   1200
aaaaaatgga accatctact aacaaggatc ctttaaaact gccaagggag ctctaacttg   1260
aagccacatc ctacagatgg cagcccaaat agcacatggg caattggcac catctttata   1320
tggttgagtc tcctgaatat tttgaatgaa ttctcaacaa aatgtgctag ccactgggga   1380
cgcaaaacaa gtaagatccc tgttgcaaga aattcatttt atagtgaggg aggttggcat   1440
ggagactaaa attctcagga aaatgagatc cgtgttagat tagaagtcct gatgtgaaat   1500
gggaggactc aggaaggagg atcgtctta cctgaggatt tctagccaga ggtcccagat   1560
gcctgggctg agaacccagc gataagggg cgttcccaaa gcagacacag ggataagaac   1620
agaggaggca gcagcattgc acagccccag gcacagtggc agttaggatg gctggagagt   1680
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gatctggtag agaccataga catgatatag actaacttcc ccattttca caagaggaaa   1800
ccatccttat gacttacctt aaagttttt gttctgtttt gaaggaaacc atgtgcttca   1860
tgaaacctac agttgacaag agaatgtaca gctaagagaa aagcttaaga ggccacacta   1920
ttcgcggaat ggctttagag gcagatgaag tggtctttga ccacagttga ttgaaccaga   1980
gcacttattg cttaaagaat aacagagttc tagagctggg ggttcttggg ccatgctccg   2040
tgtgtggata aggaaagaaa tactgtttct gggactctcc cacagtcaca aagctgtttt   2100
cactgtggcc cctacatctc ttaactttg ctattactcc tatgctgcct tccggattac   2160
tgctgtctat cttcttgctc cactcactga agatcctatt ataatcccat gaaaatgtaa   2220
attacagttt acttgggaga gccagatttt ctctgtgctc ttgagttttt tattcattca   2280
agaaaccttg ggccaccgct ttgtacatag caccgtgcta ggctctggga tcccaaatgg   2340
accctttta ctttctgaag atgggaccgt cccctggagg aaagtcattc ctgcctaatc   2400
catcgagaga aagaggctta cgaaaaactt tgcctctgat gctcagcccc accccaaat   2460
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gcctttctgg aagtattgca ttctgccgtg tttataggtg ttcactttcc tccagagctg   2580
attaactact gacatgactt ggctttctca tccagaaatt atggaaacag ggtctgtcag   2640
tggcaggagg ccgtgctgtg tttttacttgg atgacacaat gcagtttact tgcctcttca   2700
tacccatgca tgctgctcac cctagacaat gacatataag ccgtatatag atcaatgtcc   2760
acatatatat acacacacac atatatatat ataaagtgta acaaggaaca ctaaaacagt   2820
gttgattctt gtctctgaag acaaataatt aaacctttt tttcccaact aaagaatgga   2880
tttaattaaa ctatgtattg aaaaaaaagt agcctaagtg ttagagatgg tgaatatatt   2940
ccattttagt taaagaacaa atttcctgaa ttttaagcat tcagtgagct gccaatttg   3000
attttgtgtt gctctttacc caaattattt tttctttgtt tttcttttt tggggagga   3060
ggggaaaaaa gcagcaatac tgtgtttgga aattatactc tgtatctggt tttcctgtgt   3120
atgttaacca cttaaatgtt attatcctgc tttggtttta gagtgattgt gaggcattca   3180
atgcaagtat acagttattt tctcattaaa atccaatgtg tgttgagttt ttataan    3237
```

<210> 1211
<211> 2070
<212> DNA
<213> Homo sapiens

<400> 1211
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ggcacgagcc cagaagtaaa gaaaagggag ggttttaaaa taaataaata cataaacagg     60
gttttgttt tcattttcag aaatatctct aaaagcaaat agttttacag cgatatcatt    120
atatgtgtta aacttccagc tctctgagta tgacttctgc attttattt ttatttttag    180
attcagtttt gttcacttgg gcatgtgtat ggcttggaga caggcaggaa tgccaaaaag    240
ctggtagatg atggcaactg tgatgagcag aagaactcac tgcctcagtt acctggatgt    300
gggccatttt ctttccctgg agttggaggg cgggcaacaa tgttgaaact ggctggaagt    360
tgagagagaa actgaatttg tttcagggcc tagtgatatt ttagtgcata attttataaa    420
ataacagctc catyccatga atataggaga ggaaaaagat tattgagaaa ataatttttt    480
tacaggcact ggtactttt tttcatgttt tgtgttgtag ttgcatttta ctagagcagc    540
tgacaccatt cctatgtggt ctgattttgt agttcaaaga ccaaaaccaa ataaaaagat    600
ctactcttta aaaactctct tttccaatga gaggattatg gaaaaagtga cagtgattga    660
```
```

709
```

```
aagtctgtgt tctatttgcc agagtggggg agggagtggt aaggcaggtt gactgggata     720
gaccagtcac gaaggagctg gaacattcac ccaggcccat tgccatgtga mttgtagaag     780
gtctgtgggg aagacaccat ctgccactgt ttggcaggat ttggccacca tggcacagag     840
tgggcaattg tcctcaacct tggaggcaga agctggcagc tggccaaaag tctgctttct     900
cccagaagag ataggcagty actgagccga gatactgatg atgtctctct cttatcgtgc     960
aacatggaga gcgggagaaa atgagggagg acagaagaga ggagaaggag gaggaaaata    1020
agaaaaggaa tactaattaa ctcagcctgt ctatccagct aagcttgagc ttgattttgc    1080
tctctagttg aatggaacat gcaacctgaa tttctgaata acagaattac caaattactg    1140
tttaagtgtt tgagaaaaaa aggtgaaaag tgtgtgtact atatgtatag acgtatagat    1200
tgacatatag tgaattggtt aattgaatgt ctgcatcaga taagaaggtg ttaggtcaat    1260
ttccacaata atgccattaa aatcggttct ttgattaaat ccaattaaca gatgtggaaa    1320
ctgaggtttg tgacaaggtt caatccctga tttctgtgac tccaaagtat gtgctgttat    1380
ttaatgttta tgtattctct attatgaatt gttttcaagt tttttaaaat atcactagct    1440
agcctgtacg tttcttagga ggcaaaaaca attgccttaa attttgttat attttagtgc    1500
cattttgcac ataggttata agcaacagat aatttctgta atctttagaa tatcgattaa    1560
acttgttaaa atgtagatat tttgaaatct cacacaggac acctaaatta tgtraaatgt    1620
tataaacttt atgatttaca gggggccctgg agatggaagt yctgaaaaaa tgtgcctttа    1680
ttcagtatta gtgcattatc agggattcca gatytcagtt aaaatgagag aatctgaatc    1740
tctagscaat gatgagtgtt tctgaaattc agattcacca gaaagaaatt gaaagcaaag    1800
agaagacagt gttgtcaaat tatcatataa ttcagctaaa aaaaaaatca tggtacttaa    1860
gtgggagcta gagcacatca ctgcctttaa gaagatattt aggggaataa aagagktctg    1920
ggacctcgga ggtgaaactg agagaaagac aaagggactt caaatcaagc atttgaaaga    1980
gccaatgagg ggccagatgt ggtgactcac tcctgtaatc ccagcacttt aagacgccaa    2040
ggcgggatcc catctcaaaa aaaaaaaaaa                                      2070

<210> 1212
<211> 1259
<212> DNA
<213> Homo sapiens


<400> 1212
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aaaatgtata cttaaaagtg attaaaactt cacattagga aatgctaaaa acccagtaat       120
gtacataatg ataaaatcta aagtgatgag aaaacataaa atattttcat ttggtcctgt       180
cacctaacaa aactatcata aatatgagat tatagtaatt actaaagctg gttaaaggca       240
catgacaaca taattccttt atacacatcc agtcatttta tacaaggaac tgctatccct       300
taaatggaag agtgaactac ttgtttaaaa tattaacagt gcactatgta cctacaatga       360
aaccactttc tccaaagact caaacagatt aacattgcaa aatagtactt ctgtatcact       420
gacttctgaa aattttaata atttatgcat atgcaagtga aatataattt attctggttt       480
caaccaacag ttatacaaag tcacaatttt ccccaggaaa ccattcactt catagctgca       540
aaaacacact gtagcttttc tgttagggtc tgccatgctt tcagctagct ggatgtttaa       600
ccattcactt caaatttaca tgtccagcca ggcacggtgg cgtgggcctg tagtcccaac       660
tacttcgaag gctgaggcag gaggatcact tgatcccagg agttcaaaga cagcctgggc       720
aacatagaag accctgtctc ttcggaaatc atccaaggag tgtgataaac atgacaaccc       780
ccataaactg ggtaaacaac aacaatggag tgaaaaacga ccacacatgc cataaagcaa       840
tgttgaagca aattcctgct gcaataaagg aggcagtggt aatgggtatc aaggctggat       900
acttgacatc atattctcca attccacaat accattccag gtagactatg cagtaaaatg       960
caattgataa actgacaagc aacaaggcac tgccacagag aaaccagctg ctagtgtgga      1020
agttttcttt aagggtttta aagaagtcaa cataataggt cacaacaatg gatgccaaaa      1080
tccagaatcc agaatggata ttaagtcttg gaagaggttt ctcctttttc tcaacagctg      1140
tggaggtttc cggcccggcg tcaccctcgc ggtccagctg ggcctcggcg tccggcagga      1200
ggaggaatcg ccgccggagc tgctgccggg cccgcgagga gtccatcttg gctcgtgcc       1259

<210> 1213
<211> 1905
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (846)
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<400> 1213
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ccccaactgt gggagtgtct gtggctctgc agagagaagg catagactcc cagtctttaa     180
ttgaattaaa gacccagaat gaacatgagc cagagcattc aaagaagaaa gttttaaccc     240
ccataaagga gaagacactt actgggccaa aatcaccaac agtgtcccct gttccatctc     300
acaaccagtc acctccaaca aaagatgatg caacagaaag tgaagtggaa agtttacagt     360
atgataagga caccaaacca aatccaaaag ccagttcttc tgtacctgct tcactggccc     420
agctagtgac tacattccaa tgcttcagaa gtagcttcag sacagaagat tgctgtacca     480
gcaacatcac atcatttttg cttttcaata gacttaagga gtatacatgc cttggagatt     540
ggttttccaa tcaactgtat attaaggtac tcatatccat tctttggaag tgcagctcct     600
attatgacta atccycctgt agaagttcgg aaaaacatgg aagttttct tccccagtct     660
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ccattactgg ttgaactatg gcmcaaggat waaatgagta aagatttact tctgggaatt     780
gcgagaatcc agctttctam cwtcttgtct tcagaaaaaa ctcgtttttt aggttctaat     840
ggtgancagt gttggcgtca aacttacagt gaaagtgtgc ctgttatagc agcacaagga     900
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gaaggaaaac ttcaaaaaac tctaattgac ttggagaagc gagagcagca gcttgctagt    1320
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aacaacaaac cagaaatccg tctacagtct gaaataaatc ttctcacctt ggaaaaggtt    1620
gaacttgaaa gaaagttgga atctgcaact aagtctaaac tgcattacaa gcagcagtgg    1680
ggacgagctt tgaaagaact tgccagactt aaacaggcag ccaaggcaaa ataaagatta    1740
tactcacttg attgaggagc ctttaaccca gagcacctgg cactggagag gacttctttc    1800
actaccctct aacttgtgtg tgtgtgtgtg attattatta atgccctata cttgattaaa    1860
aattcaaagc atttaaagga aaaaaaaaaa aaaaaaaaac tcgag                     1905
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<210> 1214
<211> 1147
<212> DNA
<213> Homo sapiens

<400> 1214
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tgcaagggcc agggctgggc cactgccact ggacttacaa gtgactgctg aggctataca     120
ctagcttcta gaacaagata accactgctg ctgatggata cttttccctc actgccatgg     180
cacaccagtc atggatcttg taatcatgcc aagagaatag atacattatg gacctcttgt     240
tcttagatat gggcctctca gcctggcaga tgtggaaact caaatttctc gtcccactcc     300
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gtgcctctgg tctacctttg accaccactg ataactaata tattggtcac aatgactgga     840
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gctctctgaa caacttacct tggtcagagg gactcaggtt tgggacagca caagctgaag     960
gctggagagt aacttgcata gtaggaccat acctcttcct ttcccatccc acccacatat    1020
gatagacagc ccctctgttg agatatggag gggacagata ctggaatcgg gggtgggact    1080
tgcagttact taaaattttt taataaactg tgccctgaaa cctaaaaaaa aaaaaaaaaa    1140
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actcgag

<210> 1215
<211> 998
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (358)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (481)
<223> n equals a,t,g, or c

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<400> 1215
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ttggttaaaa atgcatgtct gttaggacat tgtaattatt ttgtattact taggaaaact      120
tttatgattc tactctttta attttttttaa taattacttt atgacttctt cattagggat      180
tctctcctcc agtgcgtacg cagatcttct gaaaaggaat ctgacaaatt tagttgctgc      240
attttttctaa attgctttca agactaccca gcacttcaga tacttttcat ggccctttt      300
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aacagcttgc tgtaccgact catatgaggg ctgtcttggt ccgtctcatt taaggtttgg      480
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tgcacttggg tcttgaaatc ttgggctcac cgctgcttgt accagtatct tctaccctcc      600
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gggaggctga ggcaggagga tcgcttgagc ccaggagctt aagaccagct tagggaacat      780
agtgagaccc ctgtctctac aaaaagtaaa aaataaaata aattggctgg gtatggtggc      840
acatgcctgt agtcccaccc actcgagagg ctgtgatggg agaatcaccc gaggctgggg      900
aggttgaggc cgcagtgagc cgagatcgag tcactgcact ccagcctgga caacagagtg      960
agaccctgtc tcaaaaaaaa aaaaaaaaaa aaactcga                              998
```

<210> 1216
<211> 810
<212> DNA
<213> Homo sapiens

```
<400> 1216
ggcgttcccg caaggtcgct ttgcagagcg ggagcgcgct taagtaacta gtccgtagtt       60
cgagggtgcg ccgtgtcctt ttgcgttggt accagcggcg acatgacggg gtacactccg      120
gatgagaaac tgcggctgca gcagctgcga gagctgagaa ggcgatggct gaaggaccag      180
gagctgagcc ctcgggagcc ggtgctgccc ccacagaaga tggggcctat ggagaaattc      240
tggaataaat ttttggagaa taaatcccct tggaggaaaa tggaaaaacc atatggcata      300
gttgaaaaga agtccagaat attccctgta agtcttaaca cttctgattt tyctttgtt      360
tattgttttt ctctttcctt ttcctccctt tccaagcaat tattagatta aaatgttctt      420
tccttctcac tttcggttta agtccctgtt ttgtgtattc ttgtaaaaaa caaaacaaaa      480
caaaaaaaaa caggaagaaa taccgtgagg taacaattac agttcaaatg ggaagtgagc      540
acatttattt tcaacctggc tgtaaaacgt gttttgtgac cttgatttc ctaaagggag      600
ttgaaagtac caaaagtttt tcactgtgtc ctgtttcatg ttgggtaaag agcttagggc      660
atgagcctaa gcaaacatcc atgcatggtg acagcaactg aatttctgtt attaattcca      720
aactctcatg tcctatggct ttgtacctca ttttcaagat ttgaccttaa gttctccatc      780
tgtgaattta atatccacta atgggtgttt                                       810
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<210> 1217
<211> 436
<212> DNA
<213> Homo sapiens

<400> 1217

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ggcacaggcc gggcacaccc acaggagagc aatggctgga gggtgacatg gactgcaggg    60
tgtggccgcg gcagcccagc tcttaagggg acagcctggg aaaacagact tagggacaat   120
gatcttgagc catgaaatga tgtccaatgc cccttgtgcc acctgacatc agcctgatta   180
atgaacaaac agaagaggaa gcaggggacc tgtgtgtccc tctctctgct tttctgtctt   240
tctctgtgcc ccctctctta tgtctctcac gctgtctctt gtccttgttt ttaactctga   300
cacgccgtgg gaacttggct cacttcctag ggggaagctg tctggactgg cccagagatg   360
ggcaccacca tttcccaata aacacaagat aaaatcaaaa aaaaaaaaa aaaaaaaaa    420
aaaaaaaaa aaaaaa                                                    436
```

<210> 1218
<211> 3714
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2324)
<223> n equals a,t,g, or c

<400> 1218

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tgacttcacc tgaacaagta gccgactcag tgaaacgttt cagagtgcat tttrsccaaa    60
tggcatttta gcagaggctg ttccatgcag agataaaagt attcgaatga gaacaagagt   120
agcaggaaaa acgaaatyac ttgcaattat gccagatgag ctgaagcaca ttattggggc   180
tgagacaaca cggaaaggta ttcttcgtgt ttttgaaatg tttcagcaca accaattaaa   240
taggagaatg gtttatgtct tcttggaagg cttttttagaa accttatttc cacagtataa   300
attccgtgaa cttttcaaca aactgcattc acggtcaaag cagatgcaga aatataaaca   360
gaaacttcaa actactcaag cgccttcttt gcagaaaagg tgacactcca ctctatgaag   420
ctggtgttca ttttgtccag gactaatggt atggacagat cttctggggc ttaactcaaa   480
tactgttgtg tctgcaccag tcttttagtg tctcaaaata gattattaat acatccataa   540
gtctgtggtt cttctcattc tcatctataa tccaccacta ccaagagaga tttctgtgtc   600
ttaaatgatt tggtgcatat tttgcaacat tgagagaaaa ctgcccccat ctcaagcaag   660
aatggcgttg gtttcttcca tttcaaacta atcagcattc tccagcaatg acaaagtgcc   720
agagtgtata tatgaaagct aaggaaagca caaaacaatg gttcagagat aaattggcta   780
atttgtttaa cagttggaga ctgtgcaatg tacgacttgg aggagtttgt ttggcataat   840
gattttgtag gtctgtcagc attttgatat attgtggatt agccaggtga atgatccttg   900
aaacatctct ttcaggtctg gagaaagaga cagaatgccc ttaaagtgtg aaataacctt   960
atacctgaat tacagttttg tgatataaaa taaagctgag tataaaataa aaccaatcaa  1020
acacagaatt tgattggatt tgttattcat tggtatacaa caatttttat tcttatgtgt  1080
gctttaaggg ctgtgttttg ctcttagggt actcaatttt atgtttcctt ttggcattct  1140
ttgtgcaaaa agaagcatgt ggtggctctc atttaaattt caaaattatt agttttatct  1200
ttaacagatt actgattata cagaagatat aatttattgg aagaactgcc aaatacattt  1260
tgtccttcta aaaatatgga aatttaaata gtagtctgga aagttaccat atgataattt  1320
ttaattgtgt gatctagaca tgccttaggt aactgcagaa atagcaaatt aaatgattaa  1380
tgagcttatt agtcatagta aacatacaga ttcctaattc tatgacagtg tacatatatg  1440
aaaataaatg atgaaaaaag aactataata tttttaaaaa tatgctttta tttatatttc  1500
acataatgta aagttctaca aaataaagct agtaggcaag acccctcagt gtataccttt  1560
aaacccataa attaatttta tatcaataaa ataaaatact ttctctagtt ttggagcttc  1620
tgtatttcct atagtttttct gactgtccat tttatccatc ttagaagtat tcacatccct  1680
tctatgcagg atttctgcat agttttaaat actttcattg cctaagggtt tgggtgtgtc  1740
agcttttttt gttttaaaaa tatttaacac taaaacctta aaataatgaa gctacttatc  1800
agaccactga gccaagatcc tggtattaaa agaaagtctg ggtgcttaag ataaagggac  1860
agagtattgg tatcccagtt atttgggagc tttaagattg gaacaagata tcactgtctt  1920
gttttcactt agatcctact tacaaagtga gggttattaa cagaataaag ccttcctttta  1980
aagctttata ataatcatat ttattaataa tgctgttgtg catacttata gtatgcatat  2040
attcagcata tgttgcatgt cttcagaatt acataaaatg aaatcccttt cattgcaact  2100
tgcaagtgag aaaagatcct tagtggctct ggtggargaa atagtatttc ttcttctcag  2160
ggtgtctccc tgccttggcc cctccctgag ccccaggctt taaaagtgaa aatgtttgaa  2220
acatgaaaca tgtctgtagg aagcatcagc atggccataa gtgcagtgat tttcatatat  2280
gcctctgccc atttcaaata tattttttgac atgaataaat ctancagtat acagaataat  2340
```
```

713

```
tcatgtaaga ccctaacgtg tacatgtgaa aaagcatttc tatataatgt gaggagcact    2400
ggccatcaat tagggaaata aaggtcatgt aatattgcaa attttcaaaa tagagccctg    2460
caagataact gcaatcatac caaaaactat ttgagtaaat ggattttaa agtaattttt      2520
gtttagaaga gtttatattt cagaagcaga aaatgtcaaa tgatagtctt tgtaaatggt    2580
ggtgcacctt ctctatgcac atctgtcttt tacatcagaa agagctgtgg tcatgctaaa    2640
attagagata acttttgaa tgacttggtc aagctgtgtg taaaatattt aaccataagt      2700
caagtacagt gtactatgtt taataaagtt acatttaatg catttattgc atatatgaat    2760
atatacatga agaggcttta tgtcttctgg tatttgattt tgaatgtttt ttaagtcagt    2820
ggtgccttta ggcaagaact ttcgaaatta atcattcttt gtgttttctg attttttcagg    2880
taacatgtac actatttaga aaccatcata gtttattcac cttaaaaaat tgattgtatt    2940
atttaaatat atcacttaga tgggcatttc ctataattag gatattccaa atagttgctg    3000
aaatcaattg tgccattgac caatggatgc acttggttag ccttaatttt tttwaaaaaa    3060
aaaaaaacaa aaactttctt gaatatttca gtttgttcat tttaagtttg tgctgctggt    3120
atttgggaag aaaaatcaat cagttaagtg ctaccagaaa gtgtaccaat ttttataaaa    3180
attaagaatg atataaattt cacaatctaa aatttaatt ttgtgcaata ttttcattta      3240
atgcatgtgt atttgagtaa ttgtaagata aatgaatttt taattttttg agatgtagct    3300
taaactgtct tcttaatcca acaacttaca ttccgttgtt gctgcatcct tttatttaag    3360
gacttgtttt aaaagtcttt ttgtcactcc ttggaaaatt cttttattag tagtaaattt    3420
tgcttttarg agcatggctc ctgtattaca agggaaaaaa tatgaagagc acattttagg    3480
attataattg ttaaaagata atgtgtgcat atcattgtac agtaagtgtc aactgtgtgc    3540
ctaactgttc tatcaatact ttctttcttt aacaaagaag aaacaacaat cagaatgtca    3600
gttattttta ttcaactaaa aggattaaaa aatttatttg gtttgtgttc tgtccattag    3660
aaaatactaa taaagtatta acaaacaaaa aaaaamaaaa aaaaaaaact cgag            3714
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<210> 1219
<211> 1263
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (184)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1254)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1255)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1261)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1262)
<223> n equals a,t,g, or c

<400> 1219
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ccaggtttat ggagccgtac atctttggga gccgcctgga ccacgacatc atcgacctgg    120
aacagacagc cacgcacctc cagctggcct tgaacttcac cgcccacatg gcctaccgca    180
aggncatcat cttgtttata agccgcaacc ggcagttctc gtacctgatt gagaacatgg    240
cccgtgactg tggcgagtac gcccacactc gctacttcag gggcggcatg ctgaccaacg    300
cgcgcctcct ctttggcccc acggtccgcc tgccggacct catcatcttc ctgcacacgc    360
```

714

```
tcaacaacat cttttgagcca cacgtggccg tgagagacgc agccaagatg aacatcccca    420
cagtgggcat cgtggacacc aactgcaacc cctgcctcat cacctaccct gtacccggca    480
atgacgactc tccgctggct gtgcacctct actgcaggct cttccagacg gccatcaccc    540
gggccaagga gaagcggcag caggttgagg ctctctatcg cctgcagggc cagaaggagc    600
ccggggacca ggggccagcc caccctcctg gggctgacat gagccattcc ctgtgatgtt    660
cactctcctc ccaaagcaaa ccacagccaa gcctgtctga gctgggagtc cccttcccca    720
gccctgggtc agcggcatcc tcagtcgttg ttacttactc agctgatgtc acagtgcaga    780
catccaccgt tccaccacag aaccagtggc tgagcggacc aacgttgcca tgtgcgtttg    840
ctctgtgggg aacagagcac agagggtgag cgacatgtgc agaacggccc cttggctgca    900
gttaggacct cagtggctgg tatggccrag ctgctagaag atgctgctgt ccctgtgatc    960
ccagcagccc tcccttcacc gtgacccctg acctttgtca ggaaggtgca gttttttcttc   1020
tcaatctaaa tgcctttcag gtgggccgct tccttggcta cctggttcca gggggctgtt   1080
ttgtaatgag atgctgctgg caggccactc agaggctccc agctgggttg gtgggacagc   1140
caggccagat gacctgattc cagcaaaaat aaaactcaga tttgggcaaa atgaaaaaaa   1200
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagggg gggnncccccc   1260
nna                                                                  1263


<210> 1220
<211> 1476
<212> DNA
<213> Homo sapiens

<400> 1220
ggcacgagcc gggcgcgaaa atggcggcgg cggcgacggc cgggcgctcc tgaagcagca     60
gttatggagc ttccctcagg gccggggccg gagcggctct ttgactcgca ccggcttccg    120
ggtgactgct tcctactgct cgtgctgctg ctctacgcgc cagtcgggtt ctgcctcctc    180
gtcctgcgcc tctttctcgg gatccacgtc ttcctggtca gctgcgcgct gccagacagc    240
gtccttcgca gattcgtagt gcggaccatg tgtgcggtgc tagggctcgt ggcccggcag    300
gaggactccg gactccggga tcacagtgtc agggtcctca tttccaacca tgtgacacct    360
ttcgaccaca acatagtcaa tttgcttacc acctgtagca cccctctact caatagtccc    420
cccagctttg tgtgctggtc tcggggcttc atggagatga atgggcgggg ggagttggtg    480
gagtcactca agagattctg tgcttccacg aggcttcccc ccactcctct gctgctattc    540
cctgaggaag aggccaccaa tggccgggag gggctcctgc gcttcagttc ctggccattt    600
tctatccaag atgtggtaca acctcttacc ctgcaagttc agagacccct ggtctctgtg    660
acggtgtcag atgcctcctg ggtctcagaa ctgctgtggt cacttttcgt ccctttcacg    720
gtgtatcaag taaggtggct tcgtcctgtt catcgccaac tagggGaagc gaatgaggag    780
tttgcactcc gtgtacaaca gctggtggcc aaggaattgg gccagacagg gacacggctc    840
actccagctg acaaagcaga gcacatgaag cgacaaagac accccagatt gcgcccccag    900
tcagcccagt cttctttccc tccctcccct ggtccttctc ctgatgtgca actggcaact    960
ctggctcaga gagtcaagga agttttgccc catgtgccat tgggtgtcat ccagagagac   1020
ctggccaaga ctggctgtgt agacttgact atcactaatc tgcttgaggg ggccgtagct   1080
ttcatgcctg aagacatcac caagggaact cagtccctac ccacagcctc tgcctccaag   1140
tttcccagct ctggcccggt gacccctcag ccaacagccc taacatttgc caagtcttcc   1200
tgggcccggc aggagagcct gcaggagcgc aagcaagcac tatatgaata cgcaagaagg   1260
agattcacag agagacgagc ccaggaggct gactgagctc aaaggaacag gatggcaccc   1320
agagccgcag gacggagact gggggcagcc ctcacccaac tcacaacagg ctggatgggt   1380
gggtggtaaa aagggaagga tgaggctccc ccaatgtcac attaaattca tggttttcat   1440
tcaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa                              1476


<210> 1221
<211> 475
<212> DNA
<213> Homo sapiens

<400> 1221
ggcacgagct tggaggaaga ggactggcag ttatgacagg aaggctctct atacctggct     60
ccccagtgtt ctgcccctgg cactgagcat gaggagccag gctttgggga gactttgcaa    120
tcaccccccc aacctggtcc attttccaca ggtagctttc ttgaactcac cttgacccct    180
cctcagccag cagcccccac ctccaggggc aaaggagctg aaagacagtc ctgaactggg    240
gggagctggg atcacatcag ccaggccctg tccctcacag gaagtgagat gaggtgatac    300
catggatggt gactaaggcc ccaaagtccc tgcctctctg cctccccaga aacctcacag    360
```

715

```
ccaggccagc ccccagagca gagcctgtgt aaacatgccc aggaggggag gaggggttgc    420
tacatatgag aaacagttaa aaataaattt aaaaagcaaa aaaaaaaaa aaaaa          475
```

<210> 1222
<211> 2708
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1953)
<223> n equals a,t,g, or c

<400> 1222

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agcctctttg gctcaaaagg gtgkgttatg aacgaacctc cttcagtcca actatccaga     60
cgttcattct ctctgccatt tggcacgggg tatacccagg atattatcta acgtttctaa    120
caggggtgtt aatgacatta gcagcaagag ctatgagaaa taactttaga cattatttca    180
ttgaaccttc ccaactgaaa ttattttatg atgttataac atggatagta actcaagtag    240
caataagtta cacagttgtg ccatttgtgc ttctttctat aaaaccatca ctcacgtttt    300
acagctcctg gtattattgc ctgcacattc ttggtatctt agtattattg ttgttgccag    360
tgaaaaaaac tcaaagaaga aagaatacac atgaaaacat tcagctctca caatccaaaa    420
agtttgatga aggagaaaat tctttgggac agaacagttt ttctacaaca aacaatgttt    480
gcaatcagaa tcaagaaata gcctcgagac attcatcact aaagcagtga tcgggaaggc    540
tctgagggct gttttttttt tttgatgtta acagaaacca atcttagcac cttttcaagg    600
ggtttgagtt tgttggaaaa gcagttaact ggggggaaat ggacagttat agataaggaa    660
tttcctgtac accagattgg aaatggagtg aaacaagccc tcccatgcca tgtccccgtg    720
ggccacgcct tatgtaagaa tatttccata tttcagtggg cactcccaac ctcagcactt    780
gtccgtaggg tcacacgcgt gccctgttgc tgaatgtatg ttgcgtatcc caaggcactg    840
aagaggtgga aaaataatcg tgtcaatctg gatgatagag agaaattaac ttttccaaat    900
gaatgtcttg ccttaaaccc tctatttcct aaaatattgt tcctaaatgg tattttcaag    960
tgtaatattg tgagaacgct actgcagtag ttgatgttgt gtgctgtaaa ggatttttagg   1020
aggaatttga aacaggatat ttaagagtgt ggatattttt aaaatgcaat aaacatctca   1080
gtatttgaag ggtttttctta aagtatgtca aatgactaca atccatagtg aaactgtaaa   1140
cagtaatgga cgccaaatta taggtagctg attttgctgg agagtttaat taccttgtgc   1200
agtcaaagag cgcttccaga aggaatctct taaaacataa tgagaggttt ggtaatgtga   1260
tattttaagc ttattctttt tcttaaaaga gagaggtgac gaaggaaggc aggaatgaag   1320
aagcactgcg tggcctccgg tggaatgcac ggggcacagc cgcgactctg caggcagctt   1380
ccccccatg ccagggctct gcgccgtcat gtgagactta aaaaaaaagt tgaatgactt   1440
cgtgatactt tggacttcta aattaaattt atcaggcata aattatgtag aattagaggc   1500
tttgaaaata atactggtag gttgctcaaa ggttttgaaa gagaaatcgc taggtaggtt   1560
actatctggc taatccattt cttatccttg acaatttaat tcatatttgg gaaacttta   1620
gggaaatgaa aaataaaagt cactgagtct gggtgacatt ttttaagaat aatataaatt   1680
cagtttcaaa ctcttctcac attaaaattt tgctgtgaac tcttactaaa atgagtttta   1740
rgttctgtaa gtggaaaaat gtgcttttat tttatgggcc atttttacca caactaatct   1800
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traagcagaa gagtgggatt tratgccagg cagtggagtg gcctcagccc cagattgtac   1920
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tgtatggaac ttacttttac tttttgcctt aaattttaa tgaaagcaaa ttttctgtga   2040
tggggttctc tctctctttt tttcgggggg tggagtcact aataaatttg caaatgaagt   2100
taaagacaag gcaaccatct ggcttatgct atataatact tcatttaaag aagaaaggaa   2160
aagcaaatgc acttgcagct tttgaggtct cagcaaaaat gggcatgtgt cttttttgaa   2220
gtttagaaat atcctaatct atttttattt atctaaaagt aagtgttttc cggctgataa   2280
ggctaaccct acccaggaaa ggattgataa ctaaataaat ttcctctgtt ttcccatgca   2340
ttgaaattat gttggctgag ccactgcacc cagcttttgc tggaagtttg attagcttgg   2400
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tcatgaaaat ggaatatctt ttcatttatg tagttcttct ttgataacat cagacttttc   2520
ctcttgtaaa tcttgtaggt atttcattca tttatacccca tttcattttg aggggggacta   2580
atgtaaatgg taattttgtt tgtttgtttg tttttgaaac ggagttcact cttgtcgcca   2640
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aactcgag                                                             2708
```

<210> 1223
<211> 1314
<212> DNA
<213> Homo sapiens

<400> 1223
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ttttatgaac aacactgttc gtaaaggcag taatgcttcg tgtaattact ggtacataaa     120
agtctgattt tgaaagtcac tgtaaactaa gcctgttttc tgcctttctt tctagtaaca     180
acccttcagc agcgtctgtt acagcctgac ttccagccag tctgtgcttc acagctctat     240
cctcgccaca aacatcttct gatcaaacgg tccctgcgct gccgtgtaag tattccattc     300
tgtagactga ccatttgtac aagaggaaag caaaaataaa tgtggctggt gtctgactaa     360
tgtcaaaacc tttggaatgt attaaataca gaaaatactt gtagagaaca tactaattgc     420
caggcactat tttaaatgct ttcaatataa acagctctta caactctgtg aggtaggtac     480
tactgttaaa cctgttttac aaatgtagaa aatgaagtat ctgaaggtta agtacatagg     540
gttaacccct aaaagaatag tgaaagagtg tgaactttta ggctagtgtt caggctcagg     600
gaggaccaat aaaaaataat caatttaaaa gaaagcaaga aaaatcagca aaatccaggc     660
tctggtaatc tacagaacaa atgacagagt ttcttcaata aataaattgt aaaaacaaaa     720
tggaaaagaa acctttttaga ggagtactat ccaacagaac tttctatggg tgatggaagt    780
atyctgtgtc tgtacagtcc ccgcatgata gccactaggc acatgtggct cttgagcaca     840
tgaaatgtga tagtgcagct gaggtactga gtcagtcttt aatttcattt aaataaccac     900
atgtcgctag tggctaatgt tacttaatca ttctctagat tagaagagac ttaaagttta     960
ccaaacacaa tgtatagagt ttacgtagat tcggattcaa acaaaacaga aagaaagggc    1020
ccagggggagg agggaagaag ggaaagagga aagaaggaaa gaaaaatttg tgaaatcttt    1080
gagaaaattt aaacactggt agcattttcg atgctattaa aaaactattg ggcagggcac    1140
agtgacatgc acttgtagtc ccagctactc tggaggctga ggcaggagaa tcccttgagc    1200
ctgaggagtt tgagactgta gtgtgtgatg atggtgcctg tgaatagcca ctgcactcca    1260
gcctaggcaa cacagaaaga ccctgtctct taaaaaaaaa aaaaaagggc ggcc          1314
```

<210> 1224
<211> 1022
<212> DNA
<213> Homo sapiens

<400> 1224
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ccacgcgtcc gggagcgcag actgtgtccc tgacaatggg aacagccgac agtgatgaga      60
tggccccgga ggccccacag cacacccaca tcgatgtgca catccaccag gagtctgccc     120
tggccaagct cctgctcacc tgctgctctg cgctgcggcc ccgggccacc caggccaggg     180
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gtgcctgccg catctccagc tcgagtgact ggaacactcc agcccccact cagagtccag     540
aagaagtcag aaggctacac ctatgtacct ccttcatgga catgctgaag gccttgttca     600
gaacccttca ggccatgctc ttgggtgtct ggattctgct gcttctggca tctctggccc     660
ctctgtggct gtactgctgg agaatgttcc caaccaaagg gaaaagagac cagaaggaaa     720
tgttggaagt gagtggaatc tagccatgcc tctcctgatt attagtgcct ggtgcttctg     780
caccgggcgt ccctgcatct gactgctgga agaagaacca gactgaggaa aagaggctct     840
tcaacagccc cagttatcct ggccccatga ccgtggccac agccctgctc cagcagcact     900
tgcccattcc ttacacccct tccccatcct gctccgcttc atgtcccctc ctgagtagtc     960
atgtgataat aaactctcat gttattgtta aaaaaaaaa aaaaaaaaa aaaaaaaaa       1020
aa                                                                  1022
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<210> 1225
<211> 2820
<212> DNA
<213> Homo sapiens

<220>
<221> SITE

717

<222> (68)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2818)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2820)
<223> n equals a,t,g, or c

<400> 1225

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tgggtccaga ctgcgccaca gcctctcggg agacgtgggc cctcggaacc tttttagtgc   180
cggactccgg gccgcagaga ttcccgcggc agcaggtatc acaggtggca gggactcagc   240
tcggaattct gtatagaaaa agcacctgga tcccagtctt tcaatggctt caagacaacc   300
agaagtgcct gctcttgagg ctagtgcgcc tctaggcaag atgtccctgc ccatcgggat   360
ataccgccgg gcagtcagct atgatgatac cctcgaggac cctgcgccca tgactcctcc   420
tccatcggac atgggcagcg tcccttggaa gccagtgatt ccagagcgca agtatcagca   480
cctcgccaag gtggaggaag gagaggccag tctaccctcc cctgccatga ccctgtcatc   540
agccattgac agtgtggaca aggtcccagt ggtgaaggct aaagctaccc atgtcatcat   600
gaattctctg atcacaaaac agacccagga aagcattcag cattttgagc gacaggcagg   660
gctgagagat gctggctaca cacccacaa gggcctcacc accgaggaga ccaagtacct   720
tcgagtggcc gaagcactcc acaaactaaa gttacagagt ggagaggtaa caaaagaaga   780
gaggcagcct gcatcagccc agtccacccc aagcaccact ccgcactctt cacctaagca   840
gaggcccagg ggctggttca cttctggttc ttccacagcc ttacctggcc caaatcctag   900
caccatggac tctggaagtg gggataagga cagaaacttg tcagataagt ggagcctctt   960
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tccagcagcc ttgaagcccc ccaagatgga catcccagtg atggaaggaa agaaacagcc  1140
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gagccctctt tccagggatt ctggtaaagg tggtttcttg catcccactc cccttttacc  1260
ttggcttttga cataggaaag gtatatttaa aaacttaatc agctgggcgt ggtggctcac  1320
gcctgtaatc ccagcacttt gggaggccaa ggtaggtgga tacctgaggt caggagttca  1380
agaccagcct ggccaacatg gtgaaacccc gtctctacta aaaatacaaa aattagctgg  1440
gcgtggtggt gggcgcctgt agtcccagct acttgggagg ctgaggcagg agaatcgcct  1500
gaacccagga agcagatgtt ggaccgagct gagatcatgc cattacactc cagcctgggc  1560
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gttgtgtgga agaagccatt ttgtactgct ttaaagttag actaatattc tcagcacggg  1740
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gtaatttggt taaaaacttc ctaagagaga aaattaagtc tactgatttg gtataggtaa  2280
atggacatta aactttttta aagtaaagga gatggtagat accgttagat tatagtcttg  2340
aggttcatgt gaagccagtg gtgttaactt actttgattt ccttgttcag gtcagggcct  2400
ggaacgcctg tgcggggagg tcactcaatt caaaattttc tgtatgaaag catttttcac  2460
caaaatgagc ctcatccctt tatgcaacac ataaccttac tgagggaggg aaatacrgaa  2520
gccacctttt tatttctctt cactgtgtac aagttcactt gttgtcttga acactgtctc  2580
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gagaggccct ggagtctaaa attatgagaa caattaattt atttgtgtct tctattatga  2700
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaancn  2820
```

<210> 1226
<211> 787
<212> DNA
<213> Homo sapiens

<400> 1226
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aaatatttca tcccgagagg ccagattccg ttgatattga acacatgtct tcaggcctca   120
ctgatctcct taaaactgga tttagcatgt tcatgaaggt gagccggcct catcctagtg   180
actacccct cctgatcctc tttgtggtag gtggggtcac agtctctgaa gtgaaaatgg   240
tcaaagatct tgtggcatca ttgaagccag gaacccaggt aatcgtgctg tccacacgac   300
tcctgaagcc acttaacatt cctgagctgt tatttgcaac tgaccgactg catccagacc   360
ttggcttctg agcatccgct aagaagataa gacctactca agctggaaat gccgatgcaa   420
ttttctgcca ccactccaaa tactcctcca caaccagcgt ccctgtcact aattgcgaga   480
atgatggaat tctgcctgaa gggtcttgat acctactcag tgaggtactt tgcttggatt   540
gctgtgattc ttaaaaaaaa aaaaaaaag tttttttatt ttcctgaagg cgacagtctg   600
tcttttggcg agtccaatta gtgatcgttt ccatttatcc ttaaccctct gtttgtgatc   660
ttcctgattc cacctacaag ttcattagtt ctaaataaaa gcctgttggc aagtgaaaaa   720
aaaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa   780
aaaaaaa   787

<210> 1227
<211> 2638
<212> DNA
<213> Homo sapiens

<400> 1227
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aaaaaatatc aggatggtgg aaaaactaga tctgtgtatc tctgttttgg catgcattta   120
ttcagtatct tctagcaatg gttttctct gttgatctac cgtagtatcc tattttaag   180
tttatttat ttttaaggag tattgtcatc actttcaag gtgtcttgac ttctacacaa   240
agtatatata ttcaggactt taaaaaatag cagtacacat ttaacagtag cgaattacac   300
caaaatgatt tactttgaga tttgaataat ttgcatagca gtaaatgtg ttttgtgtaa   360
catacaaata gaaaaatgac ccagtatctt aattgatact tactggagag tatcagaatt   420
acccagcagc tcttacagaa tgccataaat tctttaagac taaatattga aatcaattat   480
ttgaagtaat gttwctgatt tactgttaaa agttgctgag ctcagttttt ggagatatca   540
tttatgcctg cctgttccct tatgacagtg aggccttctt tggctccacc tagtatgata   600
atcatgggtt ctgttttagt tgatgagaag tggctcctat gaatgcctct gctcaatttc   660
ttttattt actttatttt attttaggg gtctcgccaa ctcctgggct caagtgattc   720
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ctgttctttt cagtgtctcc gtgccatcag tcagcagtgc ttacatgttt agcatattgt   840
catgcagttt ctcttctgtt cccacgagat attttttggrc aaaaaattga caaaagtaca   900
tgtgtttttc cccacctatc ccttagaaaa cctaatgtgt actgctattt ttaaaaccaa   960
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atctacaaga ctattagcag tctttttca gagcaaattt taacagctag ttgtgagtgg   1200
tttaaaatat agaaaattat taaaatctta gtttgagggg ttttatagtg ggagaaaaaa   1260
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gactaaagta gtatcagtat tctggttttc aggaaatatg tactatatag ttttaaaaga   1380
atgttgtccc accaactatt catccaagca aagaattgta actataaata aagtctcagt   1440
tacactttg cctttatcac ataatattca ttgtagagca ttgtgcaggt ccaagaatag   1500
agctgctcaa aatctttgtg gtagtttcct tagttttgt aacctgaggc atatgttcca   1560
gagaacaggg atatttgtct ggtccagtga ccttggtgat catagtcata attgaaagat   1620
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ttggatctat gtagtagttg taataacaaa tatttaaata gctattttt tgatgccatt   1740
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ttcatcccat atccagaaag taccagttat aaagattgct gaccaagcaa agttttgcat   1860
caaagtgtca cctcattgct ctgaccaaag actgactgtt gtggtttttaa ctcctctctg   1920
taaagcattt tgcatttttcc ccaagctcct ttctgaaaga agacccagtg cagagcggcc   1980

719

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aaaatagcac  agctaggagc  ctctgacatt  gtctggtgtt  ttacgtggtc  tgttcatcaa    2160
aattcccctt  ttcagttttt  aagaatgttc  gtctaacaga  agaaaatgct  gtaaatattt    2220
gtaacaacat  ttttttttaac aaggccaaaa  aagaaaaaaa  ggtttttggg  aacaaatgaa    2280
cttataaagt  ggttttatat  aaaacatcaa  ttgtcttgta  tattttggat  aagcagcagt    2340
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gtgaattatg  ttataaatgc  aaagagaaga  taaaatatta  aaaaacatat  tttctaaatg    2460
cgtagtgcat  ggttaattca  agcttctgta  cactacagta  tattccattt  tcgttcagtt    2520
tgtatatttg  ctgactatta  cttgatatct  ctaatctctt  ttcctaacaa  atatagcatt    2580
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<210> 1228
<211> 787
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (4)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (11)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (13)
<223> n equals a,t,g, or c


<400> 1228
agangggaaa  ncntggtact  ccgtgcaggt  accggtccgg  aattcccggg  tcgacccacg      60
cgtcmgacag  tccacagctg  aagagcaagg  tttcgtggca  gcacggcccg  gcccctcacc     120
ctctgtcccc  acgaggggac  ccatgggggc  tgtctttgca  gggcacagat  gaccaaagtc     180
ccttcctgct  tcctgttacc  tgtcttgctc  ctggggagaa  agaggggcct  gatgagactc     240
cactcaggtg  cacacatcac  caggtgcatc  tgcaggcacc  gggctggctg  cttgcagcca     300
ggagaaggtc  agcgagaagg  agtgtatgag  tgtgagtgtg  tgtgcatgga  agttggggca     360
ctgggcgtct  gactccctcc  ccacccaaga  gaggaaggac  ccctcaccac  ccccactggc     420
gagacagttt  actttgccga  cttgccatgt  ttttgccaaa  accaagattt  tgaaggaaat     480
gagtggccag  cgccagggcc  cagccatgtg  gcctgcccag  cctcaatgtc  acttggyggc     540
ggggtggggt  gggggtgggc  agcagcatcc  cagccttgag  atgcttcact  ttccttctct     600
gtaaccagac  tttgaaaaat  tgttcgtttc  atcaggctct  gttcctcaat  ggccttttgc     660
tacgtgcctc  ccgagaaatt  tgtctttttg  tataaatgac  aaagtgttga  aaatgtattt     720
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aaaaaat                                                                    787


<210> 1229
<211> 799
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (4)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (11)
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720

<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (779)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (793)
<223> n equals a,t,g, or c

<400> 1229
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aganggggaaa ncntggtact ccgtgcaggt accggtccgg aattcccggg tcgacccacg      60
ggcgtcaggg gtgcacagtc cacagctgaa gagcaaggtt tcgtggcagc acggcccggc     120
ccctcacccct ctgtccccac gaggggaccc atgggggctg tctttgcagg gcacagatga     180
ccaaagtccc ttcctgcttc ctgttacctg tcttgctcct ggggagaaag aggggcctga     240
tgagactcca ctcaggtgca cacatcacca ggtgcatctg caggcaccgg gctggctgct     300
tgcagccagg agaaggtcag cgagaaggag tgtatgagtg tgagtgtgtg tgcatggaag     360
ttggggcact gggcgtctga ctccctcccc acccaagaga ggaaggaccc ctcaccaccc     420
ccactggcga gacagtttac tttgccgact tgccatgttt ttgccaaaac caagatttttg     480
aaggaaatga gtggccagcg ccagggccca ggccatgtgg cctgcccagc ctcaatgtca     540
cttggygcg gggtgggggtg ggggtgggca gcagcatccc agccttgaga tgcttcactt     600
tccttctctg taaccagact ttgaaaaatt gttcgtttca tcaggctctg ttcctcaatg     660
gccttttgct acgtgcctcc cgagaaattt gtcttttttgt ataaatgaca aagtgttgaa     720
aatgtatttc ctgaaataaa tgtttcaaat gcagaaaccc aaaaaaaaaa aaaaggggng     780
gccgttttaa agnatccaa                                                 799
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<210> 1230
<211> 1726
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1695)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1707)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1710)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1724)
<223> n equals a,t,g, or c

<400> 1230
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agctccgctg cagtacagcc tgctcctgca gtacctggtg ggtgacaagc gtcagccccg     120
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gctcctggag cctgggagcc tgggcgggat cccaagtcca gccaagagtg aggagcagaa    180
gatgatcgag aaggcgatgg aaagctgcgc tttcaaggct gcgctggcct gcgtgggagg    240
atttgtctta ggaggtgcat ttggggtgtt taccgctggc atcgatacca acgtgggctt    300
tgaccctaag gatccttacc gtacaccgac tgcaaaagaa gtgctgaaag acatggggca    360
gagaggaatg tcctatgcca aaaatttcgc cattgtggga gccatgtttt cttgtactga    420
gtgtttgata gaatcttacc ggggaacatc agactggaag aacagtgtca tcagtggctg    480
catcacggga ggagctattg gtttcagagc tggcttaaag gctggggcca ttggttgtgg    540
aggttttgct gctttctctg ctgcgattga ttattacctc cggtgagagt aattgcctgc    600
agggaaggat gatgccagcc ccggatccgg gctgctctct ggaggacagt ttctgtacca    660
caccagggcc ttgcttcagg gcctgaagac attcattttc cctcatgtcg ttggtattct    720
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gccctctagg ttgtttggtg ttgtgggcac agaggtgaca gtgtctctgc aggcactcag    960
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tttatttgta ttttatttc aaattcccta ttccaaaaat agtgccgggt ggcccaaaga   1200
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cagggtcaag gaagtgtttt aacatgtcgt gttttcgact tgaccttgtg gtatttttct   1620
tggcctagtt gtgtgccatg gatattaaaa aaaaaaaaa aaatccgttt acaaaaaaa   1680
aaaaaaaaa aaccnggggg ggggccnggn accaaattcc cccnaa                    1726

<210> 1231
<211> 936
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (168)
<223> n equals a,t,g, or c

<400> 1231
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attgttattt tgtttgtttt ttaaactgca tattttgtca gtgtggcatc tcttgtctgt    120
gaaatattcc tttaacacat gtggtgtatt ttctcaccta cgtatgtntc ctcttcctaa    180
gtagtttaaa acacacacac gcgcgcgcgc gctgtgcaca tgcttattca ttgactaagt    240
tatccatgaa cctgtcattt ctgtcttctg gagcaacatg gaatctcata tttctatctt    300
aatcacatat gtttaatttt gcctttgttt tgtggtctgt gggtacattt gttatttta    360
gtatcaagtc atttggctaa atcatattaa attgcaatca cctaaaatcc cctggttatt    420
ttgacttaaa tgactgtcat cttttggtttc ccttacttag aacgtcacac agttaatttt    480
ttttttcaac ctaatggcaa gtgtgtgtgt gtgttcttgg agtagttctg ctggctatga    540
agagtatgta gtaatatgct aaagctttgt aaactcttct tttgttgttt tggaagatgg    600
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caccttctgg gctcaagcag tcctctcacc tcagcctccc tggtttgtgg aactacaggg    720
gcatgccagc atgcccggat aattttgta tttttttct tttgtagata cagagtctca    780
ctatgttgcc caggctagtc tcaaactcct gagctcaagc agtcctcctg cctcagcttc    840
ctgaagtgtt gggattacag gcatgagcca ttgcacctgg ccctaaattt taacagatac    900
aaaactataa gtttatactt aaaaaaaaa aaaaaa                                936

<210> 1232
<211> 698
<212> DNA
<213> Homo sapiens
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722

<400> 1232
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agtttaagtg tgggcatctt gagagtaaca ctgtgtcttg ttccttcttg tgttcctgct    180
attgactgca atgctcagta aatgtttcag gcatccacga atgaatgatt gaacaaatca    240
acaattaatc aattaataaa tgaaagctat catcatcagg tggaaataat gcttttaagt    300
aagactaagg gctttttatca ctacagagca taatagaaag gaaacaagcc aattaataag    360
aaataatttt gcttaaaaaa taatttttca ggcctggctc ggtggcctca catctgtaat    420
tccagcactt tgggaggcca aggcaggagg atcacttgag cccaggagtc tgagaccacc    480
ctgggcaaca tggtgaaacc ctatctctac maaaaatwca aaaaattagc cgggtgtkgt    540
ggtgcgtgcc tgtagtccca gctactcagg aggctgaggt gagaggatca cttgagcccg    600
ggaggtcgag gctgcaatga gccatagtcg ccaccgcatt ccagcctggg tgacagagtg    660
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<210> 1233
<211> 903
<212> DNA
<213> Homo sapiens

<400> 1233
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tgaattatta cacagtattc taccatgttc aagaacaact acctagagac tgtttcgtgg    120
taagtgaagg agcaaatact atggacattg gacggactgt gcttcagaac taccttcctc    180
gtcacaggct tgatgctggt actttcggaa caatgggagt tggtttggga tttgctattg    240
cagctgccgt ggtggctaaa gatagaagcc ctgggcaatg gatcatctgt gtggaaggag    300
acagtgcatt tgggttttct ggcatggagg tagaaaccat ctgcaggtac aacttgccaa    360
tcatactgtt ggtagtgaat aacaatggaa tttaccaagg ttttgataca gatacttgga    420
aagaaatgtt aaaatttcaa gatgctactg cagtggtccc tccaatgtgt ttgctgccaa    480
attcacatta tgagcaagtc atgactgcat ttggaggcaa agggtatttt gtacaaacac    540
cagaagaact ccaaaaatcc ctgaggcaga gcctagcaga cacaactaaa ccttctctta    600
tcaacatcat gattgagcca caagccacac ggaaggccca ggattttcat tggctgaccc    660
gctctaatat gtaaataaag acgccagttg gtggtcttga gttttctctt tcttgcaaga    720
tgaaatttta ttttccacag caaaattact ctactgttaa aattgtgcaa aataaaataa    780
acatttaaaa tgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    840
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    900
aaa                                                                903
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<210> 1234
<211> 1971
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1270)
<223> n equals a,t,g, or c

<400> 1234
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taanccaaga ttgcatcatt gcaatgccag cctgggaaca gagcaagacc ctgtctcaag    60
ggaggaaaaa ataaaaaaat aaataaaaat ttaaaaaaag aacacttgaa gttactcaga    120
tcaggactca tgcagagaaa agccaacagg agcaacaccc cacattaggg gaggaagaca    180
cctggggatt cactgacttc agttgtgtga atttaccct atgaccttgc ttgctttatg    240
agacagcaga ggtggccaag gtcaatccta ctgctctgtg gtgaactctg ctttctctc    300
gttaccatag gtaaagggtc atgctcctat gtaagccttc ctgttcccca gtcatttgtg    360
cacgggtag gccatcatct cctgcctatt caagggaatg actagtcctg tcttctgtat    420
cctcagtcac caacttctca gttagtgttg aaccaagcct atgttcaaaa catgactgag    480
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723

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acagacctca atccatagag atttatttag ccaaggtcca aggacacatc taggaaaaaa      540
tacgggatca caggagcatc tgcgccttct amtttttcca aagagggttt tgggaacttc      600
agtatttaaa ggggaaacag caagcaggtg aggaaaaaaa gcgaggaagt gtaggcagtg      660
acagatgctc acattcttgt gaaactctgt ttaccctagt aaatctgcat tttacatgtg      720
aaaagaggga gtaaaggaaa tagtcaataa tgcattcctc tcaggatagg cccacgtgga      780
ttttttaatct tgtccttgcc ctgtgaagat aagctggtaa ctgacattgt cagggtgaga      840
ttcagcagaa ctcagtttta ggactaactt acagaggagc tgtgtatcct gaagattcag      900
cgactggcaa ggaatttcct tgggagcaat gtgtgaggga ggccatctga ggagatctgt      960
ggctttcttt tgttgtggga atctggctta tggatgaatc tacgacacag gattgtgaaa     1020
ttacagctct ttgggaacaa aaggaaggca gtattgcatg acttagtttc ccagcttcac     1080
tttccctttg gcatggtgag tttggggtct tgagagkcta ttttctttca cacccatcag     1140
cactgttaag taagcaggaa gacaacctga ggttggctct ttactttgag ktcctacata     1200
ataaattgca gcctaattta gtacataaac ccaaacctaa tttaggagta aattttttgt     1260
agcagatagn cagatttcag ccaatcacag gcttccagct aacaagacta tgcccaaata     1320
aggcaaatgc ctcatcacat gatgctcaaa taaggcagcc acctaggcga ggccaatcag     1380
gtaacttttc tactttgctt aattgttcag cctgtacaaa tttgctgctt atgactgctg     1440
agcagagctg tctaaacctc ttctggtttg gagtgctgcc ttatatatga attgttcttt     1500
ggtcacataa aattggttaa atttaacttc tctaaagttt tgtattaaat tgtatgtaaa     1560
acattggtag cacaatttgg attcagatac ccaaatattg actatgataa tgtaaataat     1620
ccttaagcag actgatttac aaaggcctga acaagtttga tattctgaat attcacttct     1680
tctgatgaaa aaattgccaa gaccttacaa ttggcaggaa aaaaatgtgt gttggttaaa     1740
taagttatgt taacaacaag aacattacca caattagaaa actcttacta tgccaggcac     1800
tattataaac acacctttgt acctttttta atcctgaaaa atttctaata aatatgcatt     1860
taatattatt tgtatttaat attaagtgta tttaatattg ccctgttt gtgaattaat     1920
gcagcaataa actggcttgc aatggaaaaa aaaaaaaaaa agggcgsccg c              1971
```

<210> 1235
<211> 1086
<212> DNA
<213> Homo sapiens

<400> 1235
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ccacgcgtcc gcgagaaact ggagagtgag aagctaaatg tggctgaggt cacccagtca       60
gagattgctc agaagcaaaa actgcagact gtcctggaga agatcaatga aaccctgaaa      120
cttcctccca ggagcatcaa gtggaatgtg gattctgttc atgccaagag cctggtggcc      180
atcttacacc tgctcgttgc tctgtctcag tatttccgtg caccaattcg actcccagac      240
catgtttcca tccaagtggt tgtggtccag aaacgagaag gaatcctcca gtctcggcaa      300
atccaagagg aaataactgg taacacagag gctctttccg ggaggcatga acgtgatgcc      360
tttgacacct tgttcgacca tgccccagac aagctgaatg tggtgaaaaa gacactcatc      420
actttcgtga acaagcacct gaataaactg aacctggagg tcacagaact ggaaacccag      480
tttgcagatg gggtgtacct ggtgctgttc atggggctcc tggagggcta ctttgtgccc      540
ctgcacagct tcttcctgac cccggacagc tttgaacaga aggtcttgaa tgtctccttt      600
gcctttgagc tcatgcaaga tggagggttg gaaaagccaa aaccgcggcc agaagacata      660
gtcaactgtg acctgaaatc tacactacga gtgttgtaca acctcttcac caagtaccgt      720
aacgtggagt gaggggctgc cctgggccca ccactgccca agagttcttg ctgttggcgt      780
actggaccct cctccgaact gccttaccct gcttattcct gtctcttgca ctgtgctctc      840
ccacaagtcc agctgcaacc cagagatagt ggaaactgaa attaggaagg aaatcatcaa      900
taactcagtg ggctgaccca tccctcccag gcgctgggga ccaacctagc aatgaaggtt      960
gggaaggttg ttcccttccc ggtgccaggt ccagatttcc ctcatgattt gggaaccagc     1020
ttaggcaaaa gagtccccac aagatgaaaa taaagatcct agttaccatt caaaaaaaaa     1080
aaaaaa                                                               1086
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<210> 1236
<211> 559
<212> DNA
<213> Homo sapiens

<400> 1236
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ggcgagaaga cgacagaagg gatggtgatg aatccattta tatttaatgt aattactgat       60
acagttcagt ttaagtctag catattgcta cttacttttg cctcaatttt tctctcttct      120
tttcctgcct tctcttattt taatcaaata gtcttgacta tctcattaca tcatgtattc      180
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```
tagttatttt atgtatctca atattattgg tttagtggct aacttagcaa ttacaacaaa    240
actaactaat actaacatct cagacgctca ggaaatagaa accgtctgaa ctatcctacc    300
cgccatcatc ctagtcctca tcgccctccc atccctacgc atcctttaca taacagacgm    360
ggtcaacgat ycctcccttta ccatcaaatc aattggccac caatggtact gaacctacga    420
gtacaccgac taaggcggac tagtcttcaa cttcctacat acttccccca ttaatttcct    480
agaaccaggc gactgcgact ccttgacgtt gacaatcgag tagtactccc ggattgaagc    540
ccccattcgt ataataatt                                                 559


<210> 1237
<211> 1425
<212> DNA
<213> Homo sapiens

<400> 1237
gacggtgtgt cagaggtcag gtgaatatcg cagatgaggc aaaactttgt agcccaattc     60
gttcaacttt tgaagtgttg gttgtgcgat gtgtggtcag gtgttgtcgt ggagaagaat    120
tgggcccctt ctgttgacca atgccagctg caggtattgc agttttaggt gcatctcatc    180
gatctgctga acatacatct cagatgtaat ggtttcgcca ggattcagaa agctgtagtg    240
gagcagacct gcagcaaacc accaaacact gaccataact ctttttgggt gcaaatttgg    300
ctttcggaag tgctttggag cttctcgatc caaccactga gctggtggtc gcccgttgtc    360
acggttgtca tataaaatcc actttttcatt gcacgtcaaa atccgattga gaaatgcttc    420
atcattgttc gatagaataa aagaaamcat ttcaaaatga ctttttttgat ttttggtcag    480
ctcatgaggc acccacttat cgagcttttt caccttttcca atttgcttga aatgccaaac    540
aaccatagaa tggtcgatgt tgagttcttg ggcaacttct cgcatagttg taagaggatc    600
agcttcaatg attgctcaca attggttatt gtcaacttct gatggccgac aactgtgctt    660
ctcatcttca aagttcccat ccccttttgta aagcttcttg aaccaccact gccctgtaca    720
ttcattagca gttcctggga aaatgcattg ttgttgttgc gaattgtctc tgctgcttta    780
cgacccattt tgaactcaaa taagaaaatc gctcaaatty ccttttttgtc tggcatcatt    840
tcaaaagtgt aaaataaatg taaaataaac agcaagtaag aagtcattag caaaaaagaa    900
taaagtgaga aacacacatt gaaatgatgt ataacataac cacatttatt taagaatgta    960
ttacaatatc aaatgacaaa tttcaacaat gcaaaaacct caattgcttt tgcaccaacc   1020
taatatatgt atccctcaaa caactaacta tacttagcat ctctcaatgt gctcactgcc   1080
cattttttata tcttccttga agaagtctct ctttaaatgt gttttttaaa ggaattttct   1140
tgttaatatt gaattacagt tataggaatt tttatatctt caagatataa gtgctttatt   1200
agaaatatga cttgcaagta atttctccca gtctatagtt tatgtttttca tgttcttacc   1260
agtaaaatat taattctttg tcatacaaac ataaacaaat tttattaatc tagcaagtag   1320
aagtaacttg gaagtcatac ttgcaatatt aaggagaact tactgtttca acctagtcct   1380
tcaagaacta aaatgtaaaa aaaaaaaaa aaatgatcc tcgag                      1425


<210> 1238
<211> 2324
<212> DNA
<213> Homo sapiens

<400> 1238
ggcacgaggc caggccactt ggaaaaacta tggaattctt tttgaatgag tctgcttgta     60
atgtcactct gctacttcct tggtgagcta tttgaactct ctgcctttaa cctcccctttt   120
gttcataggg ctcgtcctcc agtcactact gtagaggcag gaggggagct cttatatcca    180
tagctgcttg attcccccctg tattttgtct ttctgttaac gcacataagc acatcataga    240
ctacataaca gcagtgtgag gagttcaata catgcatgta gacatacatc tcaaccaaac    300
ttagtgtcag aaaaagcaac ttcaaaattc ataattcagt gaaaagaaga agaacatggt    360
tggtccaaat gccacgacaa gctcaacaat cacaccagga atagaacctc ataaaactct    420
tgtgctaaga agcagttttg tgataatcaa agcatctctc ttttcactca ggtctaggta    480
ctgaggttaa gttagttata caaggtcaca ccaataatta ggagtatacc taggagccaa    540
actcaagtct tgtttacatt tgtacatttc acaaaacttt ataaattctc catcattaaa    600
tatgtcctgg attatctaat ctacacacac actgtccagt aagaaagaat tttctgcaga    660
aagtctcaac ttccagtgag cccactaatc tctaaaagac atgtcttact tgatttaatg    720
ttaatttctc cccacaatgc attctcttcc tctttccacg cagttctatt ttgatggatc    780
ctgataagcc ttgtacctag gaaattcttc caggctagtt tttccactac aggcgctggc    840
gtttcccact gaccatcatc atagccggtg cataatgagc ccaccaagct cttgaatatg    900
tccagagcca aatgcagaag agaaaggact gacctgggcc actgttcagt gttttactgt    960
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725

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aacacaaaac aatagaaagt gctcttttat tcactcaagt cctaaaggtg ctgtactctg    1020
gattaaagag gtagcttggg gcaaacagaa accccaaaag actcatgttt ttctttggcc    1080
ttaggaagct cagacctgac tttgtaggcc aagtttggtt atggtatgag gactttacac    1140
ttaagctttt atcttaatcc tcaattgcct aacataatta cttttgtctt atacatattt    1200
ctgtaagtca ttgtttattt ttcttgaaga acaaggtaaa ttactttcac catttttttt    1260
ttattttgaa atagtcaccc aaagttttca agatatttac cagaggaaag ttttagtgtg    1320
ccctttaccc agtttcacta aatggttaca ttttacataa ataatcaaaa tcaagaaatt    1380
gacactggtg caatatgtat atgtgtagtt ctaggtcatg ttctcacata tgtagattcc    1440
tgtaaccctg gagcaccctg aatcaagata cacaactatt ccatccccac aaagatcttt    1500
cctgctatct cttcatatcg tacccactcc cttcacccccc cgtgtattag tccattctca    1560
gaccactata aagaaatacc caggactggg taattttttaa aggaaagagg gctaattgac    1620
ttacagttct gcatggctgg ggaagcctca ggaaacttat aatcatggcg gaaggaaaag    1680
caggcgtgtc ttacgtggcc agctggtaag agagagagtg tgtaagagca aggaaaactg    1740
ctttataaaa cccatcagat ctcatgagaa ctcactcact atcatgagaa cagcatggag    1800
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tgagatttgg gtggggacac agacccagac tacatcacct ggcacccacc aacctgttct    1920
ccattgccat aattttgtca ttttgagaat gcatataaat cagttcatgt agtatgtgaa    1980
ggtaaatata ttttttgaagt acatttattt tttcactcat cttttttttct ctagatcatt    2040
ttcatttacc attttattaa catatccact tattcaagca gaagacttgg ctgggaaagc    2100
caccactgga gagattcaaa atgttctaag accactctta cttcactgta gcatataatt    2160
tggtttagta acttacacgt aaaaatttta tagatgatag gacagataac tatatctttta   2220
ttctctgtgg cagattcgat aatggcttcc caaagatgtt atccatgcct taatcccttg    2280
aacttgtgaa tgtcaccctg tatggcaaaa aaaaaaaaaa aaaa                      2324

<210> 1239
<211> 2041
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2017)
<223> n equals a,t,g, or c

<400> 1239
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tcactgtcac ttagttctgt gcagttgtgg gagatatacc cagaagacac aggcaaatac     120
aacctgggta actagctagg ggtttgttcc caagtcccta tcttatatgt cctggcgagc     180
tgccctaaac tacgtgtgag gaataaagac tgtgttcttt cagctcagac ctgtgattct     240
tgagtgtttt aagagtcttt taaaatctat gaaccctctt tccagcaagt cgtaaatgta     300
cagaatagtt ttgtgtaggt tttcagggaa ttcatgaata ccactaaagc tgttccagta     360
gactgtattg ggagtcttat aggataatta ctggcaggct tgggcaacct cttggcccca     420
ttcccttagc tgtgtgtctt gatkytagcc ctgtgaaaga gtccttcact cttaagattt     480
agagcccaga tgacctttgc cagccgttta ccttttttcc tggggtgtct tgttgatcct     540
gctgggtttc tatgggtaca agaccctctt aaacatgaag cagctctata tttgtcgttt     600
taaaatttat tttattattt ttaacaaatt ggccagagac cgcctttta aaaattttct      660
ttcctttcct tttcttcctt tcccttctgt ttccttccct tcccctttttc ttttcttcc     720
ttttttttcct tttcttttcct ttttcctttc cttccttcct ttcttgcctt tcttccttta   780
ttgctttcct ttcttttctt tctttcaccc aggctggagt gcagcmcact gtaacctcaa     840
gttcctgggc ttccaagwag tgggactata ggccacacca ccatggcccc ataatctttt     900
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atctcagact cctgggctca agcagtcttc ccaccttgat ctcccaaagt gctgggatta    1020
tagatgtgag ccaccatgcc caatctttgt tttttaatt ggcaagtaaa aattgtgaag    1080
acttatggtg tacaacatgc tgtgttgata atgtgtatac attttgtaat ggttaaatca    1140
agctctttaa catgtgtatc acctcacata cttatttttt tgtggtgaga acacttgaaa    1200
tctactctca gcaattttaa agtatataat atgttgttac taactgtagt cacatcacta    1260
tgatgtgcaa tcgatctctt gaacttactc ctatctacct gacattttgc atgctttaca    1320
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agtccaattt tgtttgcttt agaggtggta cctcactctg tcacccaggc tagagtgcag    1440
tggcacaatc atggctccct gcaatctcta actcctgggc tmaagtgatc ctcccgcctc    1500
agtctcccaa gtagctgaga ccataggcgt csgcmaccac gccccagct aagktttaaa     1560
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726

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tttttttgtag agataaggtc ttaycakgtg cccaggctgg cctcaaccctc caaagtgctg   1620
ggawtgcagt tgtgagccac tgcactaagc ctgagtcgac tttttttggat ccacacttaa   1680
gtgagatcat gcagtatttg tctttgtatg cctggcttat ttcatttaag ataatatttt   1740
ccaggtttat ctgtgttgtc ttaaatgaca agatttatt tgttgttgtt aaggctgaat    1800
agattctgtt gtatatatat gctacattat ctttatctcc tcatctgttg atggatactt    1860
aggttgattc cctatcttgg ctattgtgaa tagtcttgca ataatcatga gagttcagat    1920
atctcttcaa catattgact tcatttttg gggatatata cctagtagtt ggttttatat     1980
ccatctcatt aataactaca tgaaagacaa aaagagnaaa gaagaataat ccagctatct    2040
a                                                                     2041


<210> 1240
<211> 2054
<212> DNA
<213> Homo sapiens

<400> 1240
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aacctgggta actagctagg ggtttgttcc caagtcccta tcttatatgt cctggcgagc    180
tgccctaaac tacgtgtgag gaataaagac tgtgttcttt cagctcagac ctgtgattct    240
tgagtgtttt aagagtcttt taaaatctat gaaccctctt tccagcaagt cgtaaatgta    300
cagaatagtt ttgtgtaggt tttcagggaa ttcatgaata ccactaaagc tgttccagta    360
gactgtattg ggagtcttat aggataatta ctggcaggct tgggcaacct cttggcccca    420
ttcccttagc tgtgtgtctt gatkytagcc ctgtgaaaga gtccttcact cttaagattt    480
agagcccaga tgacctttgc cagccgttta ccttttttcc tggggtgtct tgttgatcct    540
gctgggtttc tatgggtaca agaccctctt aaacatgaag cagctctata tttgtcgttt    600
taaaatttat tttattattt ttaacaaatt ggccagagac cgccttttta aaaattttct    660
ttcctttcct tttcttcctt tcccttctgt ttccttccct tcccctttttc ttttttcttcc   720
ttttttttcct tttctttcct ttttcctttc cttccttcct ttcttgcctt tcttcctttta   780
ttgctttcct ttcttttctt tctttcaccc aggctggagt gcagcmcact gtaacctcaa    840
gttcctgggc ttccaagwag tgggactata ggccacacca ccatggcccc ataatctttt    900
ttcttttttt acttttttttt tttttttagag acgggggtct cattatgttg cccaaggatg    960
atctcagact cctgggctca agcagtcttc ccaccttgat ctcccaaagt gctgggatta   1020
tagatgtgag ccaccatgcc caatctttgt ttttttaatt ggcaagtaaa aattgtgaag   1080
acttatggtg tacaacatgc tgtgttgata atgtgtatac attttgtaat ggttaaatca   1140
agctctttaa catgtgtatc acctcacata cttatttttt tgtggtgaga acacttgaaa   1200
tctactctca gcaatttttaa agtatataat atgttgttac taactgtagt cacatcacta   1260
tgatgtgcaa tcgatctctt gaacttactc ctatctacct gacattttgc atgctttaca   1320
tctccccagt ctcccaaccc ccagcttctg agaaccacca ttctacttyc kgcttcwatg   1380
agtccaattt tgtttgcttt agaggtggta cctcactctg tcacccaggc tagagtgcag   1440
tggcacaatc atggctccct gcaatctcta actcctgggc tmaagtgatc ctcccgcctc   1500
agtctcccaa gtagctgaga ccataggcgt csgcmaccac gcccccagct aagktttaaa   1560
tttttttgtag agataaggtc ttaycakgtg cccaggctgg cctcaaccctc caaagtgctg   1620
ggawtgcagt tgtgagccac tgcactaagc ctgagtcgac tttttttggat ccacactta    1680
agtgagatca tgcagtattt gtctttgtat gcctggctta tttcatttaa gataatattt    1740
tccaggtttta tctgtgttgt cttaaatgac aagatttatt ttgttgttgt taaggctgaa    1800
tagattctgt tgtatatata tgctacatta tctttatctc ctcatctgtt gatggatact    1860
taggttgatt ccctatcttg gctattgtga atagtcttgc aataatcatg agagttcaga    1920
tatctcttca acatattgac ttcattttt gggatatat acctagtagt tggttttata    1980
tccatctcat taataactac atgaaagaca aaaagagaaa agaagaataa tccagctatc   2040
taaagtcacg aaaa                                                       2054


<210> 1241
<211> 4038
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (1764)
<223> n equals a,t,g, or c
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727

<220>
<221> SITE
<222> (4030)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (4037)
<223> n equals a,t,g, or c

<400> 1241
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728

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cagcatggag attaggaaga ggggctgctg tgaccaggag atacacacgg ctttaagtaa    180
ctgagagcct aaagaaagta acccagggag tccggtccag ttttaatatt tgtggatttg    240
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729

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aactggtgta aattgttaat gcatataagc ttgtgtattt ttgtaaatag ttttgtgatt   1620
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<212> DNA
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<222> (877)
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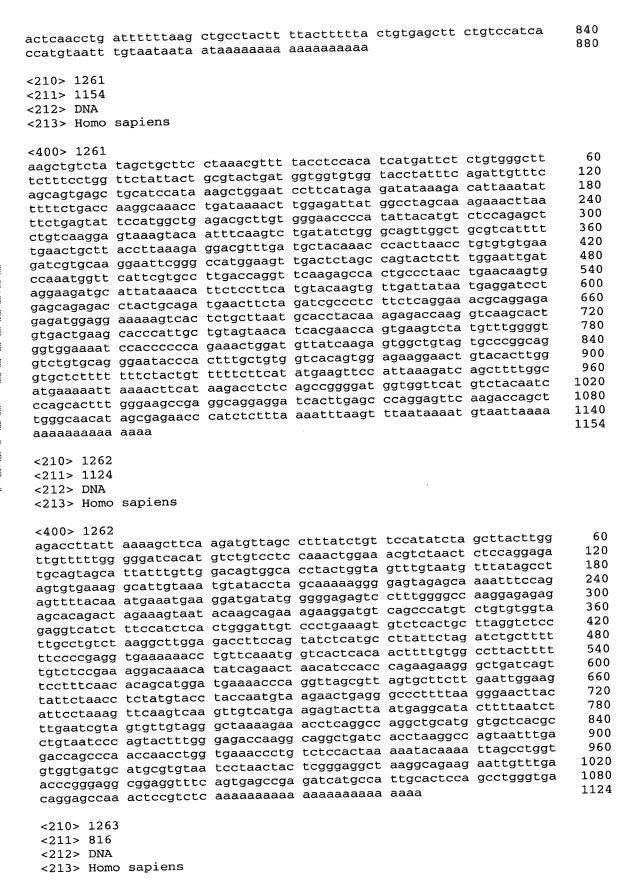
730

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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731

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gaggatttct attcacctttt aatatatttt tacaaaaaaa gcaaacaatt taaaaacaag   1020
cccaccgctt ctgtacatgt ctaaatatat ttttagaagt gggtaggatt gtgaatttct   1080
gatgcagggc cttttttataa ataggttagg gtagcatcat tcagacttct ctgttgtttt   1140
tgtccctgtc tttttcttat gttgtgttac taatgtaatt tatatttttt ttagatcctc   1200
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<210> 1246
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<212> DNA
<213> Homo sapiens

<220>
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<400> 1246
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atttccatct aaaatagaga agtagggagg aattggatca aaccagccca agaaaattta    180
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<211> 2154
<212> DNA
<213> Homo sapiens

732

<400> 1247

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atactttttcc tagggctaaa gataggtcca aggttaaaac cacaatgaga taccactta      1500
cattgactag aacggctaaa ataaaaaaga acaacaatgc caagtattaa cgggagtgac      1560
aagcaagagg aactgtcgtc tgttgctgga ggtatgtaaa atagtccagc cactttggag      1620
gacagtttga cagtttcttt caaagttatg catgcactta ccataagacc cacctatccc      1680
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tggtggctca cacctgtacc agcactttgg gaggctgagg cgggcagatc acctgaggtc      1800
aggagttcga gaccagcctg gcctggtgaa atcctgtctc tactaaaaat ataggccggg      1860
cgcggtggct cactcctgca aacccagtac tttgggaggc cgagacgggc agatcacgat      1920
gtcaggagat cgagaccatc ctggctaaca tggtgaaacc ctgtctctac taaaaaatac      1980
aaaaaattag ccgggcatgg tgggtggcgc ctgtagtccc agctactcgg gaggctgagg      2040
caggagaatg cgggaaccc aggaggcgga gcttgcagtg agccgagatc accccactgc      2100
actccagcct gggcaacaaa gcgagactcc atctccaaaa aaaaaaaaaa aaaa          2154
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<210> 1248
<211> 947
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (423)
<223> n equals a,t,g, or c

<400> 1248

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gtatctgatg tataaatacc tctctctctt tccctctctt tctaacacag atattagtat       120
tcctctgtgt cttactttat ccccttaata gtatatcttg gaaatcattg ttttctttaa       180
aaaaatgttt taattgaggt aagcattcat tatacagtaa atgtcttgtt cctttttaact       240
ggctgcatac cctgtcaacc tatggctgtg ccaacactgg agagagtctg ggttgagtat       300
agtctttttg ccattataaa cagggttgca gtgaacattc atgtgtatac ttctttgtac       360
ctatgtatga gtgtatcctg gataaattcc taaaagtgac gccactggat tggaggtcat       420
ttntttttta aactttttat tttgaaataa ttatagattc ataagaagtt gcaaaaacag       480
gacagagagg ccccagttgc ccttcaccta gtttctccca atgatagcat cttacataac       540
atgatacagc atggtatatc atatcaaaac cagcacattg gtacaatcta caaaccttat       600
tcagatttca ccagttttac atgcccttgt gtgcatgtgt gtctgtgtct ttgtggtttt       660
atgtgctttt atcaggagta gatttgtata acctcaaaca agatgcagaa ctgttctgtc       720
```

```
agcacaaaga tcccttgtgc tacctcatag tcacaccaaa cctcctctcc tccttttgtc    780
atcacggcat tcctaactgt tgacaagcag ctaatctgtt ctccatctct gtaactttgt    840
tattttgaga atataattga aatcgtatag catgtaacca ttgagatggg ttttttcact    900
caccgtaatt cccttgaaga tcatccaagt tgttgcatgt gtcaatg                  947
```

```
<210> 1249
<211> 808
<212> DNA
<213> Homo sapiens
```

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<400> 1249
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cggtcatatt cttttgattt ataagggatt ttgccgattt cggcctattg gttaaaaaat    120
gagctgattt aacaaaaatt taacgcgaat tttagcaaaa tattaacgct tacaatttgc    180
cattcgccat tcaggctgcg caactgttgg gaagggcgat cggtgcgggc ctcttcgcta    240
ttacgccagc tggcgaaagg gggatgtgct gcaaggcgat taagttgggt aacgccaggg    300
tttttccagt cacgacgttg taaaacgacg gccagtgaat tgtaatacga ctcactatag    360
ggcgaattgg gtaccgggcc ccccctcgtg tttttttttt ttttttttc caggacaaaa    420
aataaaatat ttattgatct atcacagcga gacacaaaaa gatgggcggg gcaggaatgg    480
gaactgctct gaagttcagt ggaccgaggg agggatgggg ggtatacagt actgcatgtg    540
gggacacccc gggtggggag gagatgcctg gcaccccagt ctgcacagcc ccgcacgccc    600
tggggggagtg taggatgggg gtggaggcag ggcacaggcg gccatgacag gtcaaccagg    660
ttgatggtgg gtgcacccag ccagctagtg gtgccgggcg gtcaactggg gacatggatg    720
gacggaccga tggatgaatg gacggatggg cggatggatt ctacaagggc aaggtggcta    780
ttcccagtgt ggggtggttt ctcgtgcc                                      808
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<210> 1250
<211> 839
<212> DNA
<213> Homo sapiens
```

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<220>
<221> SITE
<222> (834)
<223> n equals a,t,g, or c
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<400> 1250
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mttttmcaga gaatggtgat aatcgaratg ttattraaga tactttgggt tgtcttttgg    120
gcaggttatc cttgctagas tcagtagtga atcaacgatg tcatcagatg aaagaaagac    180
ttcagcaaat actaaatttc caggtaagta agatattatc aaaggatacg tgaccattct    240
ctaggtattc agtaatagtc agtcacgagt ctgtgttaca gacctggttg ttgttttttct   300
aaatgcgtaa tgaagaacaa gagcattgta gaaaatgaag ggggttgaat taaaggatta    360
gaagctaaag attttttgct cctagaaatg gaaggttgag aaaaccaccc acttcaaact    420
aaggactgaa tagaattcaa tcaataaaag tcaaatttat ggatcattat aattataatt    480
tttagttact aataccggag tttaaacaca ttgagaaaga atatgcmgaa aatggccggg    540
cacagtgctc acgcctgtga tcccagcact ttgggaggcc acggcaggca aatcatttga    600
ggtcgggagt ttgagaccag cttggccaac ataatgcaac ccatctctac taaaaatmca    660
aagattagca gggtgtggtg gtgcaggcct gtaatcccag ctacttggag gctgaggcag    720
gaggatcgct tgaacccggg acgcagaggt agcagtgaac tgagattgca ccactgcact    780
ccagcctagg tgacagagca agactccgtc tcaaaaaaaa aaaaaaaaa aaantcgag      839
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<210> 1251
<211> 971
<212> DNA
<213> Homo sapiens
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<400> 1251
ggcacgagct catgtttcct agtatatatg aagtgacatg tataaatgac atgaatgctt     60
tcaggcaaaa tgtttagatt gtgatttgaa aatgatgtgc atatgagaag tcgttaagat    120
gttggccaaa acagtgtgtg tataaattga gctccattgt ttatgcattt tgctttgctt    180
```

734

```
cctcttgcat tgacccatcc acttttttcaa gttcacaatg attctttttt gctgctgcca        240
ttgaaggatg ccactgatac ctgtgagagg gcactctttg gcatttgcat tctgaaagtt        300
ttgcattttc ttatttgtgt ttactttta agttcatcct tgttctgcat gacagatatg         360
ccagggcctg caggaatagc attaaaattc tgttgttttt tagataactt tattagttta        420
agttttaaat gataaggacc gagagctaca attcctctgt tttttattct gaagctgaac        480
cacacaaata ttgaaaaaca atgctttgac tggagtgtta tatatatttc cacctaacta        540
gcttcacaca ataaaatctc taaagtttaa attgcttgaa cctgagaggc ggaggttgca        600
gtgagccgag attgccccac tgcactctag cctgggggat agagtgaaac tctacctcca        660
aaaaaaaaga aagaaaaat aactgaggaa gacagttttc acagtgggtc aggtgagcct         720
agaattattg aatatcgtcc tttaacctat agctatgact ctaggttaaa gctcctcctc        780
agcttgctcc agtcaagagt atctatgtat ttgagccatt tcctgaaacc agactctagt        840
gtttctgatc aggaccagct cagtctttaa gtttctgaag tttgtttgct atttttataat       900
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aaaaaaaaaa a                                                              971
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<210> 1252
<211> 2351
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (72)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (141)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (294)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (303)
<223> n equals a,t,g, or c

<400> 1252
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aaagcgtggg gtgtgctttt ngttgagatc cgtgaatgtt tctgtaaaca caattttgat       180
tgtgttgcgc ttcttaaagg ttgtgatgac aacggtaatt ttaaccactt gaccgtatat        240
cgttttcatc cttgaagact gtcatatatt tccaagtgtc tttcctccct ggtnatttta        300
ggntaaagat cgaggtccgg aagccactag gagatttttt aattggtttt attggagcat        360
taacctggga gcgatcctgt cgttaggtgg cattgcctat attcagcaga acgtcagctt        420
tgtcactggt tatgcgatcc ccactgtctg cgtcggcctt gctttgtgg ycttcctctg        480
tggccagagc gttttcatca ccaagcctcc tgatggcagt gccttcaccg acatgttcaa        540
gatactgacg tattcctgct gttcccagaa gcgaagtgga gagcgccaga gtaatggatg        600
cagacaacat atgttttaca gagtcttcat ttgaggattc cagaaatttc aaatattaca        660
accactcctc acacgctccc tgcagcctgg ctgaccatgt ttgatgctgt gctcatcctc        720
ctgctcatcc ctctgaagga caaactggtc gatcccattt tgagaagaca tggcctgctc        780
ccatcctccc tgaagaggat cgccgtgggc atgttctttg tcatgtgctc rgcctttgct        840
gcaggaattt tggagagtaa aaggctgaac cttgttaaag agaaaaccat taatcagacc        900
atcggcaacg tcgtctacca tgctgccgat ctgtcgctgt ggtggcaggt gccgcagtac        960
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gctgccccca agtccatgca gagtgccata atgggcttgt tcttttctt ctctggcgtc       1080
gggtcgttcg tgggttctgg actgctggca ctggtgtcta tcaaagccat cggatggatg       1140
agcagtcaca cagactttgg taatattaac ggctgctatt tgaactatta ctttttcctt      1200
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735

```
ctggctgcta ttcaaggagc taccctcctg cttttcctca ttatttctgt gaaatatgac   1260
catcatcgag accatcagcg atcaagagcc aatggcgtgc ccaccagcag gagggcctga   1320
ccttcctgag gccatgtgcg gtttctgagg ctgacatgtc agtaactgac tggggtgcac   1380
tgagaacagg caagacttta aattcccata aaatgtctga cttcactgaa acttgcatgt   1440
tgcctggatt gatttcttct ttccctctat ccaaaggagc ttggtaagtg ccttactgca   1500
gcgtgtctcc tggcacgctg ggccctccgg gaggagagct gcagatttcg agtatgtcgc   1560
ttgtcattca aggtctctgt gaatcctcta gctgggttcc cttttttaca gaaactcaca   1620
aatggagatt gcaaagtctt ggggaactcc acgtgttagt tggcatccca gtttcttaaa   1680
caaatagtat cacctgcttc ccatagccat atctcactgt aaaaaaaaaa attaataaac   1740
tgttacttat atttaagaaa gtgaggattt ttttttttt aaagataaaa gcatggtcag   1800
atgctgcaag gattttacat aaatgccata tttatggttt ccttcctgag aacaatcttg   1860
ctcttgccat gttctttgat ttaggctggt agtaaacaca tttcatctgc tgcttcaaaa   1920
agtacttact ttttaaacca tcaacattac ttttctttct taaggcaagg catgcataag   1980
agtcatttga gaccatgtgt cccatctcaa gccacagagc aactcacggg gtacttcaca   2040
ccttacctag tcagagtgct tatatatagc tttattttgg tacgattgag actaaagact   2100
gatcatggtt gtatgtaagg aaaacattct tttgaacaga aatagtgtaa ttaaaaataa   2160
ttgaaagtgt taaatgtgaa cttgagctgt ttgaccagtc acatttttgt attgttactg   2220
tacgtgtatc tggggcttct ccgtttgtta atactttttc tgtatttgtt gctgtatttt   2280
tggcataact ttattataaa aagcatctca aatgcgaaat mmaaaaaaaa aaaaaaaaaa   2340
                                                                   2351
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<210> 1253
<211> 2516
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (72)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (141)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (294)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (303)
<223> n equals a,t,g, or c

<400> 1253
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aaagcgtggg gtgtgctttt ngttgagatc cgtgaatgtt tctgtaaaca caattttgat   180
tgtgttgcgc ttcttaaagg ttgtgatgac aacggtaatt ttaaccactt gaccgtatat   240
cgttttcatc cttgaagact gtcatatatt tccaagtgtc tttcctccct ggtnatttta   300
ggntaaagat cgaggtccgg aagccaccta ggagattttt taattggttt tattggagca   360
ttaacctggg agcgatcctg tcgttaggtg gcattgccta tattcagcag aacgtcagct   420
ttgtcactgg ttatgcgatc cccactgtct gcgtcggcct tgcttttgtg gycttcctct   480
gtggccagag cgttttcatc accaagcctc ctgatggcag tgccttcacc gayatgttca   540
agatactgac gtattcctgc tgttcccaga agcgaagtgg agagcgccag agtaatggtg   600
aaggcattgg agtctttcag caatcttcta aacaaagtct gtttgattca tgtaagatgt   660
ctcatggtgg gccatttaca gaagagaaag tggaagatgt gaaagctctg gtcaagattg   720
tccctgtttt cttggctttg ataccttact ggacagtgta tttccaaatg cagacaacat   780
atgttttaca gagtcttcat ttgaggattc cagaaatttc aaatattaca accactcctc   840
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736

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acacgctccc tgcagcctgg ctgaccatgt ttgatgctgt gctcatcctc ctgctcatcc    900
ctctgaagga caaactggtc gatcccattt tgagaagaca tggcctgctc ccatcctccc    960
tgaagaggat cgccgtgggc atgttctttg tcatgtgctc rgcctttgct gcaggaattt   1020
tggagagtaa aaggctgaac cttgttaaag agaaaaccat taatcagacc atcggcaacg   1080
tcgtctacca tgctgccgat ctgtcgctgt ggtggcaggt gccgcagtac ttgctgattg   1140
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agtccatgca gagtgccata atgggcttgt tcttttttctt ctctggcgtc gggtcgttcg   1260
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cagactttgg taatattaac ggctgctatt tgaactatta cttttttcctt ctggctgcta   1380
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gccatgtgcg gtttctgagg ctgacatgtc agtaactgac tgggggtgcac tgagaacagg   1560
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taaatgtgaa cttgagctgt ttgaccagtc acatttttgt attgttactg tacgtgtatc   2400
tggggcttct ccgtttgtta atacttttttc tgtatttgtt gctgtatttt tggcataact   2460
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<210> 1254
<211> 2556
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (72)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (141)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (294)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (303)
<223> n equals a,t,g, or c

<400> 1254
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aaagcgtggg gtgtgctttt ngttgagatc cgtgaatgtt tctgtaaaca caattttgat   180
tgtgttgcgc ttcttaaagg ttgtgatgac aacggtaatt ttaaccactt gaccgtatat   240
cgttttcatc cttgaagact gtcatatatt tccaagtgtc tttcctccct ggtnattta   300
ggntaaagat cgaggtccgg aagccaccta ggagatttt taattggttt tattggagca   360
```

737

```
ttaacctggg agcgatcctg tcgttaggtg gcattgccta tattcagcag aacgtcagct    420
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gtggccagag cgttttcatc accaagcctc ctgatggcag tgccttcacc gayatgttca    540
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aaggcattgg agtctttcag caatcttcta aacaaagtct gtttgattca tgtaagatgt    660
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tcgtctacca tgctgccgat ctgtcgctgt ggtggcaggt gccgcagtac ttgctgattg   1140
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caagacttta aattcccata aaatgtctga cttcactgaa acttgcatgt tgcctggatt   1620
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gattttacat aaatgccata tttatggttt ccttcctgag aacaatcttg ctcttgccat   2040
gttctttgat ttaggctggt agtaaacaca tttcatctgc tgcttcaaaa agtacttact   2100
ttttaaacca tcaacattac ttttctttct taaggcaagg catgcataag agtcatttga   2160
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taaatgtgaa cttgagctgt ttgaccagtc acattttgt attgttactg tacgtgtatc   2400
tggggcttct ccgtttgtta atactttttc tgtatttgtt gctgtatttt tggcataact   2460
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<210> 1255
<211> 2127
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (72)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (141)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (294)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (303)

738

<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1938)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2045)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2117)
<223> n equals a,t,g, or c

<220>
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<222> (2121)
<223> n equals a,t,g, or c

<400> 1255

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tgtgttgcgc ttcttaaagg ttgtgatgac aacggtaatt ttaaccactt gaccgtatat    240
cgttttcatc cttgaagact gtcatatatt tccaagtgtc tttcctccct ggtnatttta    300
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agatactgac gtattcctgc tgttcccaga agcgaagtgg agagcgccag agtaatggtg    600
aaggcattgg agtctttcag caatcttcta aacaaagtct gtttgattca tgtaagatgt    660
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gcaaagtctt ggggaactcc acgtgttagt tggcatccca gtttcttaaa caaatagtat   1860
cacctgcttc ccatagccat atctcactgt aaaaaaaaaa attaataaac tgttacttat   1920
atttaagaaa gtgaggantt tttttttttt taaagataaa agcatggtca gatgctgcaa   1980
ggattttaca taaatgccat atttatggtt tccttcctga gaacaatctt gctcttgcca   2040
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<210> 1256

<210> 1256
<211> 1105
<212> DNA
<213> Homo sapiens

<400> 1256
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gaccttccct gaaaactctg caagaaaaag gacttattaa agatcaaatt tttggctctc   180
atctgcacaa agtgtgtgaa cgtgaaaatt ccacagttcc gtggtttgta aagcaatgca   240
ttgaaggctg ttgagaaaag aggtctagat gttgatggaa tatatcgagt ttagtgggca   300
atctggcaac aatacagaag tttaagattt attgtcaacc aagtcgtttc tggaatacca   360
gcccttctat cagaactgga tggagacctg tggacacccc taagtaagct gcagattttt   420
cacagtggtc atttgacctc cagagcaagc caataatttg tcacttcatt aaactgaaga   480
gaagctgaat ttggacgaca gccagtggga ggacatccac gttgtcaccg gagcactgaa   540
gatgttttc cggggagctgc ctgagccgct cttcccttac agtttctttg agcagtttgt   600
ggaagcgatc aaaaagcaag acaacaacac aagaattgaa gctgtaaaat ctcttgtaca   660
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tacccttctg cgagctgaaa atgaaccagg aaacatggcg atccacatgg tctaccagaa   840
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acagacaaga caagctactg aatacgttca catctgtctt gatgcctaat atttttacat   960
ttctgtaaac atatttctga aatattttt gcctttcaag cgacagatgc ctcattttgt   1020
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aaaaaaaaaa aaaaaaaaa aaaaa   1105

<210> 1257
<211> 1274
<212> DNA
<213> Homo sapiens

<400> 1257
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gattacaggc atgagccacc gcgcccggcc tgaaagcatt ttagaaggct cctgactgaa   120
agaacgggat aaagtaaggg ggtatgggaa cagaagatga cagcctggta tatctgggtg   180
acatgcgtag gcagtctgtt gtagtggcaa ttgtcagggc tctggagtta gactgtcttc   240
tttcaaatct tgcaagctgt ctgatctcgg gcgatttact taacctctct gagagttctg   300
taaagtggag aataagaata ccaccctaca gatgatgagg attcaatgag attgggctgg   360
atacaaatca gctttttgttg gcatcagctt gagaggaggg atggacttgg gagtggagag   420
ggtggatttg ggggagagga cgccacacag tggcaggaac tcgcagcagg tgactgagag   480
tggaaggcac aagagcagcc agatgctgag ccagctcaga atagaaacgg tattgatagc   540
agaatgcaaa gcagtatcac tcgaatgacg gatgtttaat tggatttctc cagggctgac   600
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tgtataattt tttaaatag ccaagctggg tgtggtggta tatgcctgtg ttcccagcta   1140
cttgggaggc tgaagcagga gaatcgcctg aacctgggag gtgaggttgc agtgagccaa   1200
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aaaaaaaact cgag   1274

<210> 1258
<211> 1491
<212> DNA
<213> Homo sapiens

<400> 1258
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tgaccgcagc cctcatcctt taccggaggc gccagagcat cgagcgcggg gcctttgagg      240
gtgcccgcta cagccgcagc agctccagcc ccaccgaggc cactgagaag aacatcctgg      300
tgtcagacat ggaaatgaat gagcaacaag aatagagcca ggcgcgtggg cagggccagg      360
gcgggaggag ctggggagct ggggccctgg gtcagtctgg cccccacca gctgcctgtc      420
cagttggcct atggaagggt gcccttggga gtcgctgttg ggagccggag ctgggcagag      480
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gccctggagt ggcccagtac ccttccaaga ggccacagtc ccagccagga caaagtatgc     1320
ggcccatcct ggtgcgacag cgtgggacaa tgtgaacatg gactcgaaga catggccctt     1380
tctctgtagt tgattttta aatgtgccat tattgttttt aaaaaaaaag gaaaaaagaa     1440
aagcaaacaa ataaaacacc tttaagaggc ttgaaaaaaa aaaaaaaaa a               1491

<210> 1259
<211> 3045
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (128)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (141)
<223> n equals a,t,g, or c

<220>
<221> SITE
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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (770)
<223> n equals a,t,g, or c

<400> 1259
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ctgtgtgngt gtgtgtgtgt ntgtgtgtgt gtgtgtaatc tgttaggttg gggataggtt      180
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gcaagtgttt ttgtatgtgt gggtgaatgt gtgttcatgc ccgtatatgt ctacacacag      300
atgacaaatt atatttgaaa tcgttggaaa ataaattcag atcaaaatgc ctttcaggcc      360
cattacctag aaatctatct taaaacctgg gtatgttcct aaggtcattt ctttgcttat      420
gctaaattaa ttacaattat gaatggagga tattctactg tactttttta aaaagaaact      480
atttttgtgt ttgaaagtga aaccaacatc cagatctata gcagagtcct tattcttctc      540
ataaatcttt ttactttggc tacaaataga tgatggtatg attctattat atatttwata      600
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741

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tcaactcagg aactatggnc aaggaacttt ccccagatca aattcyattn aacgctgaga    780
tacaagtcat ccatgcacag ccactatcat acccttttat ctcactgaaa ggcagaactc    840
agaacctgtt attttatgtc tgtaatcatg tactttggca tcttttggag gaaaggggca    900
ggataactca ctggaatgta cagtattttg ctagtgcatt tcaaggaatg gaatcttctc    960
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acagaatgca atttaatgga tatttctcag cctggttcag aataaattga tcctttgatc   1080
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aagctgtaaa ttactatggc tgatttattt ctactatata catatatatt ttttgctttt   1200
gtatatccta tataggaaac taagcattgt attttttta acaaatctaa aaaagcacta   1260
tgaactacag gtgtttgact ttcaaaatat attttgtatt gttaatatct tcacattgtg   1320
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aatttggctc acttgcctta gatccaaggc agggaaagga aaagaagggg ggtctctggc   2040
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tggtgttttg ggactttttt tttttttttt ggccttttgt acaaagatta gtttcaatgt   3000
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<210> 1260
<211> 880
<212> DNA
<213> Homo sapiens

<400> 1260
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acacctgggg tcaaaggtca ctgccaaata gacagctaga actggggttc acctaagcat    180
cccttgagat gtacaacctt ctaggaggac attcctcctg cctgcccccc tccccgcaag    240
aggtcttttc aggaataact gaaaaaccca tggggtttgt ggtcctgctg ctctgccaag    300
tccctcttgg gcagctgggc tgaggactgg aacattctgt ggcaagcagg aggcctcagc    360
agagatcacc aagacccagc acacctggtg cagacagcca cggcatcctc cttcctgcag    420
gtcaccccca cgagccactt aacctctcag agcctctgct tctcacctgt caagtgtgtg    480
aggtagggta ccagttagtc acggtacttg ctgtctcaca gaggagccga caggtgagaa    540
cagtgtgcat gtgggtgtga acactcagtg tggaaagcag gtgtgtgtgt attcaatccc    600
ccaatggtgt caagggctcc tcaaaatgcc atgggtcccc aggtcattgt gataaacact    660
gtccccatcc tgctgtggtt gtggctggaa ggtccctcaa ggagtagact gtccctgaga    720
acaagatgga tgcagggtag tgacgagttc aagcatagct agagttactg ttttttagca    780
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                                        742
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actcaacctg attttttaag ctgcctactt ttactttttta ctgtgagctt ctgtccatca    840
ccatgtaatt tgtaataata ataaaaaaaa aaaaaaaaaa                           880
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<210> 1261
<211> 1154
<212> DNA
<213> Homo sapiens

<400> 1261
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agcagtgagc tgcatccata aagctggaat ccttcataga gatataaaga cattaaatat    180
ttttctgacc aaggcaaacc tgataaaact tggagattat ggcctagcaa agaaacttaa    240
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gatcgtgcaa ggaattcggg ccatggaagt tgactctagc cagtactctt tggaattgat    480
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aggaagatgc attataaaca ttctccttca tgtacaagtg ttgattataa tgaggatcct    600
gagcagagac ctactgcaga tgaacttcta gatcgccctc ttctcaggaa acgcaggaga    660
gagatggagg aaaaagtcac tctgcttaat gcacctacaa agagaccaag gtcaagcact    720
gtgactgaag cacccattgc tgtagtaaca tcacgaacca gtgaagtcta tgtttggggt    780
ggtggaaaat ccaccccca gaaactggat gttatcaaga gtggctgtag tgcccggcag    840
gtctgtgcag ggaatacccca ctttgctgtg gtcacagtgg agaaggaact gtacacttgg    900
gtgctctttt tttctactgt ttttcttcat atgaagttcc attaaagatc agcttttggc    960
atgaaaaatt aaaacttcat aagacctctc agccggggat ggtggttcat gtctacaatc    1020
ccagcacttt gggaagccga ggcaggagga tcacttgagc ccaggagttc aagaccagct    1080
tgggcaacat agcgagaacc catctcttta aaatttaagt ttaataaaat gtaattaaaa    1140
aaaaaaaaaa aaaa                                                      1154
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<210> 1262
<211> 1124
<212> DNA
<213> Homo sapiens

<400> 1262
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ttgtttttgg gggatcacat gtctgtcctc caaactggaa acgtctaact ctccaggaga    120
tgcagtagca ttatttgttg gacagtggca cctactggta gtttgtaatg tttatagcct    180
agtgtgaaag gcattgtaaa tgtatgtatacctta gcaaaaaggg gagtagagca aaatttccag    240
agtttttacaa atgaaatgaa ggatgatatg ggggagagtc ctttggggcc aaggagagag    300
agcacagact agaaagtaat acaagcagaa agaaggatgt cagcccatgt ctgtgtggta    360
gaggtcatct ttccatctca ctgggattgt ccctgaaagt gtctcactgc ttaggtctcc    420
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tattctaacc tctatgtacc taccaatgta agaactgagg gccctttta gggaacttac    720
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gaccagccca accaacctgg tgaaaccctg tctccactaa aaatacaaaa ttagcctggt    960
gtggtgatgc atgcgtgtaa tcctaactac tcgggaggct aaggcagaag aattgtttga    1020
acccgggagg cggaggtttc agtgagccga gatcatgcca ttgcactcca gcctgggtga    1080
caggagccaa actccgtctc aaaaaaaaaa aaaaaaaaaa aaaa                      1124
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<210> 1263
<211> 816
<212> DNA
<213> Homo sapiens
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<220>
<221> SITE
<222> (720)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (735)
<223> n equals a,t,g, or c

<400> 1263
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ccttccccat ccccagccct aggcaaccat ctgttttctg tctctacaga tttgcctatt   120
caagacattt catataaatg gaatcatacg atatgtggtc ctttgtgact ggtgtctctc   180
acttaacata gcgtttttaa gatccatcca tgttgtagca tgtatcagta ctacattcca   240
cttcattgtt taataataat aataataata gttcattgta tgggaatacc acgtttgtga   300
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tgcctcatct aacactttga ttatactttt tattatcata tgtgtggctt caggtttttg   540
tttggttggt tggttttgcc tgtgtctgtt tttatcactt gattataaac ttctggaaaa   600
agatcattat tttcactctg aaatttccat acagcaagta ttcaataagt gtttggcaga   660
tggatgaatg ggcagatatt ataggttctt accatgttga ttatgaagaa gtacaaagtn   720
ttcagaataa aaacnctaag cacagtaata aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   780
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa   816

<210> 1264
<211> 1232
<212> DNA
<213> Homo sapiens

<400> 1264
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aacttcaggc agatggcaag agctgcaacc ggtgccggga aggccacgtg gaccttgttc   180
tgctggttga tggctccaag agcgtgcgtc cacaaaactt cgagctagtg aagcgcttcg   240
tgaaccagat tgtggacttc ctagatgtgt cccccgaggg cacgcgggtg gggctggtgc   300
agttctcgag ccgcgtgcgc accgagttcc ctctgggtcg ctacggcacc gcagccgagg   360
tgaagcaggc ggtcggagcac agcttctcca aggcgcaggg tgcacggccc cgtgccctta   480
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gggcagcgcg cgccaaggag gaaggcatcg tcatgtacgc cgtgggcgtg ggcaaggcgg   600
tggaggcgga gctgcgcgag atcgcctcgg agccagcgga actgcacgtg tcctatgccc   660
cggacttcgg caccatgacg cacctgctgg agaacctcag aagcagcatc tgtccagagg   720
agggcatcag cgcagggaca gagcttcgga gcccatgcga atgcgaaagc ctcgtggagt   780
tccagggccg cacgctgggg gcgctcgaga gcctgacgct gaacctggcc cagctgacgg   840
cgcgcctgga ggatctggag aaccagctgg ccaaccagaa gtgagggtca cggacggccc   900
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tccggcattg agctgagttg gcctcgcccg gaccattagg cggactgcgg cgtcagggg   1080
atagcgggtg gtgagggaag gggcacgtgc tagaccggca cgccctcgcc gcgtgtgcgc 1140
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa   1232

<210> 1265
<211> 854
<212> DNA
<213> Homo sapiens

<400> 1265
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744

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aagagggaat ggtttaaaat agaagacgcc ataaaagtgc tgcagtatca caaacccgtg      180
caggcatcat attttgaaac attgaggcaa ggctactcag ccaacaatgg cacccctgtc      240
gtggccacca catactcggt ttctgctcag agctcgatgt caggcatcag atgactgaag      300
acttcctgta agagaaatgg aaattggaaa ctagactgaa gtgcaaatct tccctctcac      360
cctggctctt tccacttctc acaggcctcc tctttcaaat aaggcatggt gggcagcaaa      420
gaaagggtgt attgataatg ttgctgtttg gtgttaagtg atggggcttt ttcttctgtt      480
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ttctgaagtg ttcctgtttg tcttatcctg gccctggcca gacgttttct ttgattttta      660
attttttttt tttattaaaa gataccagta tgagatgaaa acttccaata atttgtccta      720
taatgtgctg tacagttcag tagagtggtc actttcactg cagtatacat ttatctacac      780
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<210> 1266
<211> 2092
<212> DNA
<213> Homo sapiens

<400> 1266
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aatttttata atatcttgca tatatcttta ttatcacatt gttattgtta catgcactgg      180
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tcacaactag tgataataaa aacagctaat gtttgttggc acatctgtgc cagcactatt      300
ctaaatgctt aattttaatc atcacaacaa ccctatgagg tagatattgt tatccctgtt      360
tttcagatga ggaagccgag gcagagagaa cttaagttgc tggcccaagg acaaacagct      420
agtagacagc agtcaaggca gcgtggctcc atggtgatgt gcttggtcag agatctgaat      480
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gatattttag tagataaaat tctaggttag tagaacatag accacatgtt ataagctgat      600
atcagttgat ggaagaaaaa tggtttttaca agttattttc aggatctcta tcaaaccttt      660
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accgcagagt gtccctacct cctctccaga gcatcattcc tttctatctg ctgccagagc      780
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tcattccttg ggccagcttc tcaggtggct ttagacctca acaagccgta tcttcaccag     1080
tgttctatct tgttccccta aattaataaa atgttttct ccaggatttt ggtgagggtt     1140
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caaatcttaa gatctgtttc tactattcag ttcctcaaac tgaagcttat tgaaaaaaaa     1260
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aatttccagt tatttctttg gagaatttta tgtcattgtt ccattacctt gaatgttgga     1380
aagatatgat acgtgctgct tgttcatcac aaaaatcagt aagcacaata aagtggatgc     1440
caaaccatca gacacataaa tgttcccgct gtgtccctgg atatggaata agcaggtata     1500
aaaaatattt taattatagt tttgttataa atataactta tgagaaaaaa atttgatagg     1560
aataatactg tatattacta attttaact atccctaagg caaaccttat gacccacaga     1620
attttctcat atacagtatt cagtgcacag aaatcttatg attggctcaa gtacagtaag     1680
ttacttctca gtaaaactct caagtctgag tccatatttg tagctctgct tttggctgta     1740
cgttcctagg atcggggctg cttatgcctt tcgtttatcc ttggggtttg agagcgctgt     1800
atttgggaga gagtttaaaa atacattagg agagagaaac cattaaaagt ttcactgtca     1860
gagatattgt aggtgctaat actggatttc gtctcagatt taatttcttt tatgggtctg     1920
ttagtcattc aacaaatccc ataagtatgt gttaatattt taattgtgta aaactcattt     1980
gttactttac agcctgtaat agtgtgtctg cattttcaac ctgttgcaat aactttgctg     2040
aaatattaac acattaataa aacttttctt aaacaaaaaa aaaaaaaaaa aa             2092

<210> 1267
<211> 1352
<212> DNA
<213> Homo sapiens
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<400> 1267
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gaaactcact gattttggca tacagctata tgagtattga caaacagtcc tagtcctgca   180
accatcacca cagattagga acatttccat cacccctaga aattccctcg tgcccctttg   240
tagtcattcc ctgcatctgg gcaactacca atctgtttgc tgtccctgtg gtttctaggc   300
attattggaa acctgttttg tttataaccc cttttcacct cctcttctgt gttcctytct   360
gagcctacag tctctgtttt cctgctccac acacaagtcg gcctgcttta ttatcccaac   420
actcctcctc ctggggtaga atttctcaca tcctcaatga gatggagctt ggctgaatgt   480
gagggaagga atctgtttta atgtttgcct ttggttcctt gctttgtatt tagagaatct   540
gtttagttcc ccagatgaat ctctgttttt agggattgtg acagttttaa cataggtgga   600
aatgaaagat cactggtgca gggcgacgag catgtttgac actgatactt ttccaattcc   660
tgggtatttt gaaggtccag agggagccaa cctgttcatc taccacctgc caggagtttg   720
gtgatcagga cctgctgcag atgtttatgc cctttgggaa tgtcgtgtct gccaaggttt   780
tcatagacaa gcagacaaac ctgagcaagt gttttggtat gttggcttct ctctggtgtc   840
aggatgggat tagtatttta ccactgagaa agaaggagct cactgcagaa agatctgaat   900
atgagtttgt ggtgttgttt taacttggcc atgggcaggt cattatgacc tcttttttgag   960
ccccagtttc tcattgctgt agtggaggta aggatttcta cccacactgt tgctccagag  1020
agaaaaataa tatatggaaa atggtttgca aaaaaacctt taaacagtcc aggtttgtgc  1080
ctgtaagtcc cagtacttgg ggaggccaag gcaggaggat cgcttgagcc taggagttcg  1140
agaccagcct gagcaacaga gtgagacctc atggctacaa aaaattagtc agacgtggtg  1200
gcgtgtacct gtgttcccag ctacttgagg ctgaggtgag aggatcacct gagcccagga  1260
ggccaaggtt gcagtgaacc atggtcacac cactgtactc caccctgggt gacagagcaa  1320
gaccctgtct caagaaaaaa aaaaaaaaa aa                                 1352
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<210> 1268
<211> 1658
<212> DNA
<213> Homo sapiens

<400> 1268
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attcggcaga ggttgatcaa tgttaggaag cttgctaatg acactctcat ccagaacttt    60
tggagagtag ggagaaacta acaaaataac agagagccga ggaattccac ttttactaat   120
cattcatttt gaataatctc acttatttac tcagtaaata tatgttgctt gcttaccata   180
tatttatttc agtaagtata tgtcgcttgc tgggtcctgg taatgacagt ggtgagtttc   240
cttcccttgt tagtgggatc tacagccacc tataacttaa gattctcccc cacacagccc   300
agacatacac acaacgctaa gatctgaatg cctgtgcccc caaaaattca taagttgaaa   360
tcctaacccc caaggtgatg tgaaaaatgt accaaaccct gtccagaatt ttggaatcgc   420
ctcccagata ctttatctag agactctttg tyctacttcc ccacaagttt ttcattccag   480
tatttaatca ttgagtgttt ctgcttgtga tacttgttgc aaagtcaatg atagtcaaag   540
aagttcaaaa attggttact ttggacttaa caagcaaatg cacttctagg tggctttga   600
aaaccaaaag tacacctaag tagagagctt ctgttttta tagtgattat atgaagagta   660
atgggtgaaa agcatcaaag ctggaattgg agctctgggg tctacaccgt ttccaatgaa   720
tcattcctaa tgtgatgctt tcatccatgc tcttggctct gtctgggatg tctcctctcc   780
gccaggccct gatttcagtc atccaggccg agtttaatta tgtataactg tcttcgttta   840
tttggggcac taaaacaaaa ataacaaaaa tactatagac tgggtgtcct aaacaccaaa   900
agtttattac tcacagttct gcaggccggg aataccaaga ttaggttatc tgcagattct   960
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ggctycactc tcacagscta atgacctycc aaagggccca gcttcaaaca ccatcacgac  1140
aacatatgaa tttgtgggag atataaacat tcagcctata gccataacca gatgttttg  1200
caaccaagat ggtgaattct tcctgagcac gtgccagtca gactccagga gagcagggat  1260
cccatgcact tatgtacttc catccatctc acagcctcca tcgctttcag aaggttgagc  1320
tgcccccagg taccaaagca aggactggaa tatagctgag agatagaaat gttttgcaaa  1380
atgttgctta cagattcaga acttaaactg atttcgatct cttgggaaag aaatatgaat  1440
tctaatctga tttcaatcc tctggaacaa aaaacctttt gtatctatct ttcttcaatg  1500
atgggaaaaa gtaaaatacc ttccaagcct ccactaatcc ttctactgat gtcttctata  1560
ttcgtgattc agatgtgcct tgtagacaag cacagatctt cactgctcac ttctgccata  1620
aatgcttcac aaattaaaaa aaaaaaaaa aaactcga                           1658
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<210> 1269
<211> 774
<212> DNA
<213> Homo sapiens

<400> 1269
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tttaagttac aggataattc ctcccagtaa aactagcctc caaaggtttt aatggcaaaa        60
tccaagtatt caaatctata atcagccttt taagcaggaa cttaaaatga catgacagtt       120
ttaattatct tgttcttcgt ccaagagtca agtagtaggc atgagtacac tttttacatg       180
gcttatggtt ttacgttatc ttctaccaaa cagctgtttt gtacttaata ggcctagttt       240
ctgtaaccca tttggaactt cccccatcag ctgtcgaaag gcttcaagtt gagaaacact       300
gcactgtggc ttcttcaaat ggcttttctt tttttgagat agggtctcaa tgtcacccag       360
gctggagtgc agtggtgcca tcatggctca ctgcagcctc gacttcctgg gctcaagcca       420
tcccctatc tctcagcctc caagtagct gggactacag ctcgcgccac tgcacctagc       480
taaattttat attttttgga gagacggggt tttgccatgt tgctcaggct gatctttaac       540
tcttgggctc aagcgatcca cctgccttag cctcccaaag tgctaggatt ataggcgtga       600
accaccacgc caacctcaaa tggctttcct ttaaaatttc ttgagcctag tccgaagata       660
gtgagttatc tcagttgatt gttcacagtc agttacagat tgaactcctt gttccactct       720
tttccccatt ctcactactg cacttgacta ttctttaaaa aaaaaaaaa aaaa             774
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<210> 1270
<211> 411
<212> DNA
<213> Homo sapiens

<400> 1270
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cccacgcgtc cgacgtcttc ctgcgcgatc aaccctggta caaggcagct gtggcctggg        60
ccaaccagaa ccgggcacca gtactcagca tagaccctcc tgtgcatgaa gtcgaacagg       120
gcattgatgc caaatggtca ctggcactgg gcctgcctct gccactgggg gagcacgcag       180
gccgtatcta tttgtgcgac attggcattc cccagcaggt cttccaggag gtgggcatca       240
actaccactc gccctttggc tgcaagtttg ttatcccact gcactctgct tagagggttc       300
ctgcgcaggc aggactctgc tgtcccctgc tgctcctgat aacaaacgcc ttaaggatat       360
gaagcttcat ggaccttgtt aaagtttttt ctctttaaaa aaaaaaaaa a                411
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<210> 1271
<211> 779
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (709)
<223> n equals a,t,g, or c

<400> 1271
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aggagccagt cagacagata cattgataac tccatttgtg ggtttaatag accacaactt       120
ccaggcccag ccgaatcctg ctgaagttaa ggatgtattc ctggtgcctc tggcctattt       180
cctgcatcca caggtccatg accagcatta cgtcacacgt cttggtcacc gttttattaa       240
tcatatcttt gagtacacaa accctggaga cggtgtcact taccagatca agggaatgac       300
ggcaaacctt gcagtgttgg tggcctttat cattttggaa aaaaaccca cctttgaggt       360
tcaatttaat cttaatgatg tattagcatc ctctgaagag ttattcctga aggttcataa       420
aaaagctaca agcaggttat gatttactag agcaagagac aaagaactat tcacgaggat       480
tctgtgtgtg cttattcgta gaacaacaac aatgccagct gttggaattt gacaggtgtg       540
aatatttttt ctgcagtatg tagttagaat ccttgcttct tttccagttg ccttctattg       600
tctgaaaaag taaaagccat tcaaaaatga aaactatgtt catagtgttg catattttca       660
cccacaatat gttaataata ttttcttac acatataata aagaatatnt ggcacatact       720
aggccttaa taaagatttt ttgaatataa aaaaaaaaa aaaaaaaag gcggccgc          779
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<210> 1272
<211> 638

<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (38)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (66)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (625)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (635)
<223> n equals a,t,g, or c

<400> 1272
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ccttgncttt aaaaaaaaaa atgcctgcaa accccaaaaa taaatagccc ataatttgcc   120
catctttgga gagattatgg agataatctc ccttgtctat tagcccacta gcatggctaa   180
ttgatcattg attggacctc attacataag ggggctgtgg acgtctttgg aatttgttag   240
gggaaggcta tgtggtaagc tctactaaat gtatctgtac aaggatgaag aaaaacaaaa   300
taactactac ttttggagga aacttggaac aagaagagta catagtttga tccattccta   360
cggtcgagtc taatcaattc catttcttag tgtatgcatc taatgaggct tacaacttgc   420
taaccccaaa agaagcaata aatgttaagc aattttagta accagtatgg catgtatctt   480
atttttgaat gcattcctcc ttatccccat cctcttagga atatggacgt tttactaagt   540
aataaagatt tcaaatgcta aaaaaaaaaa aaaaaaaaaa aaagggcggc cgctctagag   600
gatcccgsga ggggccccag gttantccaa agagntcc                          638
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<210> 1273
<211> 1055
<212> DNA
<213> Homo sapiens

<400> 1273
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tttgttagag ttatagattt atgatttcat aggcttgatt ctatgtgaaa tatcttttta   180
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aagaaaaact cttggcttgt tagaagaaag tatattcttt ctagaatttg gtgcaggaat   300
atgtgttcat atccaggcaa acgggtgtgt ttttatcttc agacaatgaa accttctcct   360
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atcattccag atacctcttt tcttctttcc aaatggtttt cacatgtgtt tgaaatattt   480
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gcaccaatcc cgcattcaga acctcccagt gaaagggcag ccttcatttt gagaaggtgg   600
aaggtgttag ggtttgggag acagctcatc caatctccca agtctcatgg tggatttgtg   660
actgtgagag tttccggttt aaaatctgaa aagccagata tgcctgtttc cttttcccag   720
caccatgcct gtggagggga cagtcagacc cagaggtcct ttacgtgtgg atggagttca   780
caggcgaata gaggagagga ccaggggacg tggcttgtcc cttttgtcca acaaagcatt   840
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atatttttaa gaatggcaga cctgtttgct gaagtgttca taagataaca ataggcttga     900
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tttgtatcca ttaaaacagt atattgatct cttttattct ttattaaaat aaaatgctct    1020
tttttaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa                                1055
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<210> 1274
<211> 1161
<212> DNA
<213> Homo sapiens

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<400> 1274
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gtgaccccgg tggacacacg cgttcccatc ctggcctccg tctctgcttt tccacttcta     180
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ctccggttca ctctttccaa acaggcctcc ctgtcggtgg cactgcactc ctagaacctt     300
cagtttctac gatggtttgt ttggtccttt tgaaccaccc caaagaactc aacatggcaa     360
agcaaatggt aaaagcttcc cgactgttct actttgggtc cgcgcgaagc ccactcacgt     420
gtgatctgtg ttgcccctct cggtggtccc aggcgatcca gccatgcccc ctgcccctct     480
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actcaggatg tagctaacac cactccgcca gtgctttcag taggaagagc tgaggctgcc     600
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cagatcgaat ttcgacccct gagcttgttc ggacgtatgg tccaaattca gattaaggtg     720
gtcacccaac ccgagatgtc aggaaaggcc ttctgcagag aaaatgtccc cccacccgcc     780
atctgcagcc aggtgtgtgc cacacggcag ccttcccgaa acatagtatg gatttttaaaa    840
atgtgtttat ttttgtttct caaccacttt ataacgtatt ttttaattta ttttgtaatg     900
tcttgttttg aagtattgct gctatccttg ttatccttcc cactgttttt atcactgatt     960
tattttgtga aagttgtaca ctaatgttct atgtcaaaat caaaagtatt taatgaaata    1020
ctagttctat ttaatgtggt tatggaacca gctggaaaca caaacaaac agtgattgta     1080
cagcaggctg ggcccaggag gtcaggttca ttttgttaca tatgcaataa actcacgact    1140
ttaaaaaaaa aaaaaaaaaa a                                               1161
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<210> 1275
<211> 1681
<212> DNA
<213> Homo sapiens

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<400> 1275
aattcccggg tcgacccacg cgtccgctca acttctacca gttcctcggg gtgcagcagg      60
atgcatcatc tgcagacatc agaaaagcat atcgtaagct ttcactaact ttacatccag     120
acaagaataa agatgaaaat gcagaaactc agtttagaca attggtggcc atttatgaag     180
ttttaaagga tgatgaacga aggcagaggt atgatgatat tctgatcaat ggacttccag     240
attggcgaca gcctgtattc tactacaggc gggtgagaaa aatgagcaat gctgagctgg     300
cattactctt gttcattatt ctcacagtgg gtcattatgc tgtggtttgg tcaatctacc     360
tgggaaaaac aactggatga actactaagt ttgaaaaaag agagaaaaga aaaaaaagac     420
tggcagcaag agtgtggatg tatcaaaact cggtgcttca gaaaaaaatg aaagattgct     480
gatgaaacca cagtggcatg atttgcttcc atgcaaactg gggatttggt tttgccttac     540
actaaaagca ttacctcacc tcatccagga tgctgggcag ttttatgcta aatataaaga     600
aacaagattg aaggaaaagg aagatgcact gactagaact gaacttgaaa cacttcaaaa     660
acagaagaaa gttaaaaaac caaaacctga atttcctgta tacacacctt tagaaactac     720
atatattcag tcttatgatc atggaacttc catagaagaa attgaggaac aaatggatga     780
ttggttggaa aacaggaacc gaacacagaa aaaacaggca cctgaatgga cagaagagga     840
cctcagccaa ctgacaagaa gtatggttaa gttcccagga gggactccag gtcgatggga     900
aaagattgcc cacgaattgg gtcgatctgt gacagatgtg acaaccaaag ccaagcaact     960
gaaggattca gtgacctgct ccccaggaat ggttagactc tccgaactca aatcgacagg    1020
ttcagaattc caggccatca aaacggccac caccttggcc cgatgacatg atcacccagc    1080
gagaggacgc agaggggtg gcagcggagg aggagcagga gggagactcc ggtgagcagg    1140
agaccggggc cactgatgcc cggcctcgga ggcggaagcc agccaggctg ctggaggcta    1200
cagcgaagcc ggagccagag gagaagtcca gagccaagcg gcagaaggac tttgacatag    1260
cagaacaaaa cgagtccagc gacgaggaga gcctgagaaa agagagagct cggtctgcag    1320
aggagccgtg gactcaaaat caacagaaac ttctggaact ggcgttgcag cagtacccaa    1380
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749

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ggggatcctc tgaccgctgg gacaaaatag ccagatgtgt cccgtccaag agcaaggaag    1440
actgtatcgc taggtacaag ttgctggttg aactggtcca aaagaaaaaa caagctaaaa    1500
gctgaatatt ctgggagatg atgttcacct tcattttcca aaatgaatat cttaaaaatc    1560
ttatgcagaa atttgcattt tgtacctcaa tatttctacg tcatgtgcct tagtaaaaaa    1620
aaataataaa taaataaaag ataaaaaaaa aaaaaaaagg gcggccgctc tagaggatcc    1680
c                                                                    1681

<210> 1276
<211> 678
<212> DNA
<213> Homo sapiens

<400> 1276
cacgcgtccg gattttttcac taattggttt gtttgaatta tctagatact ctttcataat     60
aattctatat tgcttatgac ttgagtcttt gaacaagaat ggtaagtggc ctcataaaac    120
atagcaattg gctgtgtttc accttagcac tagtacatgc caaatgcagc atctcttttt    180
ctttgttaca ttgtagcttt gccatgctgt tatgcagtgg cttggatgta atcttttagt    240
catagtggag tggtttggat taatttgttg cattttacta atggacacaa aagcatagta    300
tcctgttaat taactggtca caaacttata aagggacttc ctttagagtt aaagatttag    360
agttaaaggt taaaggttta ggttgggtgc cctggctcat gcctacagtc ccagcacttt    420
gggaggccaa ggcaggcaga tcacttgagg ccatgagttc gagaccagcc tggccaacat    480
ggtgaaatcc cgtctttaca aaaaatacaa aaaattactg gtgtggtggt gggtgcttgt    540
atcccagcta cttgggaagc tgaggcacaa aaattgcttg aacccaagaa gcggaagttg    600
caattgaaat catgccactg cactccaacc cgatgacaga acaagaccta tctcaaaaaa    660
aaaaaaaaaa aaaaaaa                                                   678

<210> 1277
<211> 610
<212> DNA
<213> Homo sapiens

<400> 1277
aattcccggg tcgacccacg cctccgaaaa aaagaaaaga aaaaagaaa gagtgctttc     60
ctcttagaat tgtgagatgg gtataaaagt aaaataattt agcacagtgt cttgtacata    120
gttaatgtgt gagacttatt attaagttaa aaagcaacca cattttcaca ttttgcattt    180
tagaaagata tttaaacgt atttcacatt tgcctgatga tacattattc cttattatgt    240
ggtttctgtc actgctgttg tcattcattt gctttttaat atctgcagaa tatgaaatat    300
gtctctttta agttcttatt attagtgtgt gtgtgcacac ctgtgtgtgt ttttcatct    360
gtctcagtag gagtaccgtt caatttggtt tttcaaagaa agtaactttt gactttgttg    420
actctgtctt tttattattt ctttcattaa cttttattct aatctgtatt acttccttcc    480
atctaattta tttttatttt attttgtttt attttttgag acagagtctc actccagcct    540
ggatgacaga gtgagactcc agtgagactc ttatcaaaaa aaaaaaaaaa aaaaaaaaaa    600
aaaaaaaaaa                                                           610

<210> 1278
<211> 1264
<212> DNA
<213> Homo sapiens

<400> 1278
cggcacgagt ctttttttttg gcctgtctta cctacagttg tattttcctc tttaatcata     60
aggatttaca tcaggaaaaa taacctgaga atagatgtgt tttgtttgaa tgtcgtagtt    120
gtgccctttg taaaattacc ccagggcatg ataagaaaag gagtaagcaa ttaaaatgca    180
cagggctacg gcaagggcag gcagatctga gtggaggctg ctgtcctgtg aagtagacct    240
ggcaggggat ggctgctccg ggctggcctg ggcctcgctc tgcctctgtt gttgctctga    300
cctttgacaa atcattccct tgcctgtgtc tcggttgccc catctgagcg agaggctgga    360
ctaaaaggtc actaaggtca cttgtagcct gaccttccat ggctctataa ttctctttgt    420
tatctttggc cacttacatg tttgccatga tcattgccaa tcaaactagg aatgtttagc    480
agatttttaga cactcagact ggaaaataca gacgaggcca tagaagttag tgttgtccta    540
gggatggctc ctggttcacg caggctcctc ataggtccc tgccgctaca caccacgagc    600
ccaccgagac tgctgcagcc tcgctcatcc agaacagagg caccatggcc aggaggccct    660
```

```
tcctttgttg ggtaggagct gcccccgtcc atgttccagc tcctcccagg cccccatgga       720
taaaataggg ccacaggtga caagtgagtt ctgtgaccct gaccggcagc agctgccagc       780
gaaggaggaa ggaaacacag acaggaggtc tcagagcaca gcacgccaga cctctagtcc       840
acacagtcct gcacacattg ccgtctttgt ttaaagagag gcggaggcag accccaggca       900
ttcaaatgat agaatgcttc tgctgtgcct gcatccttcc ctcctccact aggagcctct       960
ggttccagcc cagatgaacc cactgggctg ggaacgccac acaaaagcac tctccaagcc      1020
agccagaggt ccctgagggc caagacaggg ctgaccagag gcagtgtctg gacatcctac      1080
tgggagctcg ggaggaggca gtgacagctc aggccagtaa tgggtattct tgagagcaat      1140
cccaggtcat caaggaaga aaaggttatg cttcgtatac tgtgttcagg ggccagataa      1200
gttttaatac gttccagaag tgtgctcaag caaaaaaaaa aaaaaaaaac tcgagggggg      1260
gccc                                                                   1264


<210> 1279
<211> 942
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (437)
<223> n equals a,t,g, or c

<400> 1279
ctgcaggaat tcgscacgag ccagctcgaa aaaatccatg cttttgagac cgagaatctg        60
ggaggagttt tgagtcatgg gcgtgaatgc aaaaggagag taagagaatg ggacgagacg       120
gggcagagcc gagaatatta caaagaaggg ctaagctatg ggcttccttt ctgtctggtt       180
cttgcttgca tcttgccatg ctatcatttg ctactttct tgcctcggtg gtttgtaaaa       240
aataagagcc ccgggtgcat gtgtcccctc attcactctg tgtgggcaaa ggaaaatgaa       300
gcccttatgg tcacctggtg tttctaactt taaaacagcc tcatatctct tatttaattc       360
acacagaaat cctgtgtgca gagccaagga tattcccatt ttatagacaa ggaaatggag       420
aaaaaggttg agaaaankga tcttccagtc acatttacct mttcctgcct cccacaagtg       480
cttcctgggt cctatcccag ggttttttttg tactttactg attttaacaa atacagcctt       540
tgatcactct cagctacctg ccacactggt gccatcacta ggtgagttat aaagactcat       600
catcatgata ctctccatga ttgggagcat tctatgtgcc aggaatttt ctgggggctt       660
ttcacatcgt atttccttct gatccccaca actctccttt gagatacaca gtgttatgat       720
gcccattgta cagatgaggt gaggtgcttt aggccacaca gccccagcca acacatgcag       780
acatcacata gctaggaaat gcgaatccag catctgaatg tgttagcaca gagggtcccc       840
tccctggata aaccttctgg aactcccggt catgtaagac aatgtccaaa ttcctcagtg       900
tggtgtgcat gcacccctgc agccactgcc ctgcccctcg ag                         942


<210> 1280
<211> 1522
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (357)
<223> n equals a,t,g, or c

<400> 1280
nccccgggct gcaggaattc ggcacgagag agagaacgca tgcaaactcc atctcaaaaa        60
aaatgtattg tttatctgca attctgattt aattgggcat cctggatttt ccctggcaat       120
tgtattcctg gagcaacaag aggactctca acaccaaaca ggccatcccg ttcctccatc       180
aggtccctac agcatttgaa gtaaaatcca aaagtcctgg cttcgcctgc aaggccctgc       240
atggctgaaa ggaaacagca gccagcccca cagactttga ggagttccca gggtggatca       300
```

751

```
ggcaggcaag tggattttgt ggtcctggtc cctcacggtt gtctgttccc ccacatnctc    360
ctagaacccc ttgttcgtgg aggctgagga gaaagtctcc tacaactgct gccgccargg    420
cactgtctgt ttgcaaatcc agatggaaag gaacaccttc acgccaggag agaaggtcgt    480
cttcacaaca gagrtcaacw wccakaccag caaatgcatc aagacggtcg tattcgccct    540
gtatgcccac atacagtacg agggcttcac gcccagtgca gagcggcggt ctcggctgga    600
cagcagcgag cttctgaggc aggaggccaa cacccccgtg acccgcttca acaccaccaa    660
ggttgtcagc accttcaacc tgccgttgct gctgtccgtg agcagcagca cgcaggacgg    720
tgagatcatg cacactcgct acgagctggt caccaccgtg cacctgccyt ggtccctgac    780
cagcytcaag gccaaagttc ccatcatcat caccagcgcc tcagtggact ctgccatctg    840
ccagctgtca gaggacggag tgttacccgt gaacccagat caccagaatt aagtgcccga    900
actttaaat attaaaagct ttattagtct ctaccaggag gaagccctct ctcttgcaca    960
ggtgactctc agaggagtcg aggagtgggc aacaggttgt ctgcaacctc cccaagctct   1020
agcggtttag gtatctgtgt ctcccctccc tagaactatc actgaatgcc tggaatggac   1080
aaaggaaacc gggaagktct cccaggaccc aaacccggca taacctgcct tttccaccct   1140
gaktctgccc cagcctactg gggtctcaca gtgccaagac caggggtcct acttgggggag   1200
aattctcccc tctgctaatg tctggtttat tggctgtcac aactgcaggg gatcggggga   1260
gaagagtctt attggcgtgg agagggtgga ggccagggac gctgttcagc accctgcagt   1320
gtccaggacg gcccccacaa tcaggaattg tttatcctga atgtcaacag taccaagggg   1380
gctgagcatg gtggctcatt cctgtaatcc caggactttg ggaggccatg gctggaggat   1440
cacttgagac caggagtttg agacaagcct gggcaacact gtgagacccc catctctaca   1500
aaaaaaaaaa aaaaaaactc ga                                           1522
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<210> 1281
<211> 1446
<212> DNA
<213> Homo sapiens

<400> 1281
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ggcacgaggt agctgccagc accattgttg ttaacttggc tctggtgtgg tcgcacaggt     60
acagcacctg gtgcacagga ggctctgaaa ccacaggccc ttccccattg cccttttcccc    120
cctgttctgg gcttgaccct tcctgtgagg gcctggacct cctgcttccg ctatctccca    180
gtggctggct cagcatggct ctttctcatt tgctccttca ttctcgccca ctccttgagg    240
tctgtctatc tcacgtcctg ctgtcccctc atgaacgccc ccttcttctc tttccctgcc    300
tcctttctgg tctctctggg gctgtcctca gagtccttct tgggtagttt cagggctgct    360
gccaagtcca cccwgwgcgc ccctgcgctc tgccccaagc agtctggagc aggcacttttt    420
cccagaacac tgggggtttgg aaaacagaac gtcccttttag gcctctgtga cctgctccca    480
acttttagat gagtttactc aacctttggc ttccgggtgc aggctctgcc tcctctgggg    540
ccgtctcacc tgtgcaggga cagcagctga ttctgatact ggattccaar tgggctccct    600
ggggccttcc ttgtgggcac cctgagctct ttcaaggcca ttccccacct cacttccaca    660
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ggccagcatt cctgcctctg gatggagagc cagaaggctg agctctgaaa ggcccaggag    780
attgggcaat ggtgggtgga tctccccacc tgaatctgat gtgggtgcag caatgcctgg    840
aatgacttgg tgactgctga ctgtgtttgt ccttgcctgg gtcatgcagg gcaccaccca    900
tccaggatat gggtcagggg aggtctctga ctcacagtgc ttctgggcga attcaaaagc    960
agaggctcct tgggtgtcag aagtggaaaa cgggagggag tgtttttaaaa acccacctcc   1020
catcctccag aagggaaacc aggacccaga agagcaaagt ctcatgcatc tcaactacct   1080
gcttagcatc ttagaggcag cagtagtgtg tcgccattaa gaacacagag ggccgggcgc   1140
agtagctcac gcctgtaatc ccagcacttt gggagaccga ggarggtgga tcatgaggtc   1200
agaagatcga rgccatcctg gctaacacag tgaaacccccc ccatctctac taaaaatata   1260
aaaaaattag ccaggtgtgg tggcacacgc ttgtaatccc agctactcgg gaggctgagg   1320
caggagaatc acttgaaccc aggaggcgga ggttgcagtg agctgaggtg gcaccgctgc   1380
actccagccw gggggacaga gcgagactct gtctcaaaaa aaaaaaaaaa aaaaaaaaaa   1440
aaaaaa                                                              1446
```

<210> 1282
<211> 1193
<212> DNA
<213> Homo sapiens

<400> 1282
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ggctgtcgcc cagcctggag tacaatggcg cgatcccagc tcactgcagc ctcccccctgc    60
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752

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ctgggttcaa acaattctcc tgcctcagcc tcccatggtg tgccgccaca cctggctatt      120
ttttgtattt ttagtagaga cgcggtttca ccacgttgac caggctggtc tggaaatgca      180
gtttttgcac tgtctgcctg cttacctttta tagagcatat tttgccctct tccatcagaa     240
ttacccattt aatggtcagg aaaagctgct gggaatatga ctcatagctg ggacattctc      300
tgcactgtgc atagttcctc tctgccacca ccatggagga gattgatggg tttgaaaccc      360
aggggaagtc attgccctgc gagggtctcc ctcattgaga atctggatcc cctcatgtgc      420
acatggtgag gtcagagtcc cctcctcaca gtgtcccctt ccacctcccg tgaactgttc      480
tttccttcca ggaggccagc aagcgcatct ccagccacat cccctttgatc atccagttct      540
tcatgctcca gacgtacggc cagcagcttc agaagggcca tgctgcagct cctgcaggac      600
aaggacacct acagctggct cctgaaggag cggagcgaca ccagcgacaa gcggaagttc      660
ctgaaggagc ggcttgcacg gctgacgcag gctcggcgcc ggcttgccca gttccccggt      720
taaccacact ctgtccagcc ccgtagacgt gcacgcacac tgtctgcccc cgttcccggg      780
tagccactgg actgacgact tgagtgctca gtagtcagac tggatagtcc gtctctgctt      840
atccgttagc cgtggtgatt tagcaggaag ctgtgagagc agtttggttt ctagcatgaa      900
gacagagccc caccctcaga tgcacatgag ctggcgggat tgaaggatgc tgtcttcgta      960
ctgggaaagg gattttcagc cctcagaatc gctccacctt gcagctctcc ccttctctgt     1020
attcctagaa actgacacat gctgaacatc acagcttatt tcctcatttt tataatgtcc     1080
cttcacaaac ccagtgtttt aggagcatga gtgccgtgtg tgtgcgtcct gtcggagccc     1140
tgtctcctct ctctgtaata aactcatttc tagcaaaaaa aaaaaaaaaa aaa           1193
```

<210> 1283
<211> 921
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (773)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (813)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (851)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (885)
<223> n equals a,t,g, or c

<400> 1283
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agatgctagt actttaaaag gaaataaggg aaaagccggt cttaactata tagatttttt       60
tttaacataa atggctgcta tttggcactt tgcttttttgc acttacctag atgtcctgga      120
catctctcca cgtccactta tagacaactg cccaggtgtt ttcctggctg cagagatgat      180
gtggactgaa ttcatttggc caatccccag gcaatggcca cttaggttat ttcccaagtt      240
ttgacaccac aaacaaagct gcagcgagtg aatcagcttg tctgggctcg tgtgtctgtg      300
aaaactatgt ggcaacactg aaacagattg cacacccaaa gcctgacttc tggctcctct      360
tgggaatcag aagctctgcc tccctggccc acacgccata cttttagaag ccccactgcc      420
ccagagccct atttgtccat gaattcctga ctcattgtct ggagcctgct tgagggaggc      480
tgggcagggt gtgagccacc aggattaaag gttgtttgta gcctctgcct ccaaatagtt      540
acctgcaaaa ggggacaagt gaagccacaa agattctact ttaaaaaaar aaaaaraara      600
ctcattaaag ttcccttagg tgtctccaga gagagcccag aggggcccag gagaccagag      660
ttctggtcct gtctgtcaaa gaattggtct gtcagagaat tgggccactc tctgaagggc      720
cccatccttg gtttaatgca tccagccctg actgtttgac cttggtgagg ggnctcagtg      780
acgtcatctg tgaaatgggt acagactcct tgngggagtc tgtaagctca gctgtggttg      840
gcaatataga ngcataaaca aagttgaaaa gctcctggcc agtgnggtgg ctcacacctg      900
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taatcccagc actttgggag g                                         921


<210> 1284
<211> 1059
<212> DNA
<213> Homo sapiens

<400> 1284
ggcacgagca ccccaggtcc atgagggcgg ggactttga ttggtttgct gttgcctgtc    60
aagagcttta tttactccgt gcacaaatga ctgaatcagt ccagccctca gtgattcatc   120
tgttttccct cttccttttc ccatatcggg tgtgcgaacc tctgctcacc aagtaccagt   180
cgggtccttc tcctgcccac gtgaaggaag aaggcgcagt ggggctgagg cctcactagg   240
gcacccacac ggagcgctgc gctcagcctt tggacccggt acctccccag gctctgagga   300
cagcagcagc cccaggacgg acgggtacgc caagtcctgg ggaccctctc ccaagctctg   360
tcagggcggc ggggtggcgc gcgctcctcc ctcgggcgct agctctggaa atcgcgctag   420
gcagaggtgg gcttgtgtcc gcacccgcag cctccgcgtc aacaccctag gggagaggga   480
cgcgggcagg ggtgccgggc ccaggctccc cagccattct caggccagaa cccccttttt   540
aacaagacat ggccttggtg tgtcgcggac tctgccgggg acagtctggc agaactgggc   600
tccttgcgct ccccagtata ccggctaatt ccgtgccctt tgcaaacttc atattttgat   660
ttcaaattta aaaataatca ataggccggg tgcggtagct agctcctgta atctcagcct   720
cccaaagtgt tggcattaca ggtgtgtgct atcacgctgg ccttattttt attttttgaa   780
atggagtctt gctctgttgc ccaggcagga gcgtagtggc tcgatcatgg ctcactgtag   840
cctccgcctc accctcccga atagctggga ctataggtgc gtgccacggt gcctggcccg   900
aatggctttg ttatacccac gtgaacagta ctacgtttta ctaacagaaa agcatcaaat   960
gagacttttc ttccgaaact atgttcagag agtgactgca gtattgcctt ggcaatctag  1020
tgaatgtatc ctcaccgcat taaaaaaaaa aaaaaaaaa                         1059


<210> 1285
<211> 590
<212> DNA
<213> Homo sapiens

<400> 1285
ggcacgaggg tggatgcctg tagtcccagc tactagggag gccaaggcag gagaatcgct    60
tgaatctggg aggtggaggt tgcagtgagc cgagatcaca ccactgcacc ccagcctggg   120
caacgagtga aacttcctct caaaaaaaaa acactgcact gagaggcaga agacctaatc   180
tcctgaacct ctgtgtatct cagtgtcatc atggacatga tgagactgga taagcctcag   240
agcctctggg gaaggctgtt tgcaaacatg accacagttt ctcccatccc tataagttgc   300
ctctttgcag cttgacattg ctgcttctct tgtcaagaag tggagatttt tttcccctct   360
ccttgaatct gggctagctc tgtaacttgc tttgaccaat agacagaagt gacctgatgt   420
gacttttgag tctaagcctt aattgcctcc actgtcaccg tcttggagcg atagtgtagc   480
cctgtgaaga agcctgggct ggcttccttg aggataaaag accaggtgcc acagaaaggc   540
agtcatgtga gtcagcccca ggcaaaacca gcaaaaaaaa aaaaaaaaaa               590


<210> 1286
<211> 965
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (193)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (643)
<223> n equals a,t,g, or c


<400> 1286
gcagctctag aaatctttcc ttctggtgct ctgatttgcc tgcctctggg aggaagggaa    60
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gggaagaccc  tgcaggactg  aggtttgtcc  tggctgacag  gcctgccagg  cttgttccgg      120
gctgcagaga  agagaggcta  tttttgttgt  gggagctgaa  ttgttggtct  ctctccagga      180
gcacatgctt  gtnggtgtgg  ttgatgtrtc  ttgcctgctg  tggccatctc  taccactgct      240
tccagaaaac  acttgagaat  acgtttgtcc  caagaggtta  aacctgagat  caggatcagg      300
catctgtgct  cttgtcttgt  gttccactcc  cttctggcca  ttggaagggc  agtagcagaa      360
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tcagtaggct  gatggagctg  cccttgccct  caccagcctg  gtggggtttg  cacagtgctg      540
cagttcatct  cacctactgt  ccaaatctcc  ttttatcagc  ccagtccagg  aacagtggtg      600
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gcaggcaatt  ctagtattcc  atgtcaagaa  ggctggcaag  aaggctggtg  gggcaggtgc      720
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ctcattgcag  cctccaactc  ttgggctcaa  gtgatcctcc  tatctcaacc  tcttgctgag      900
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tcgag                                                                      965


<210> 1287
<211> 1175
<212> DNA
<213> Homo sapiens

<400> 1287
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ggacaggctg  accacatagt  gtttctacag  gcacgcctca  cttcaggaaa  gagggtatct      180
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actcccctga  ggagtgaagt  agaagggatt  taggcgggag  tattcacaaa  ccccttcagc      300
tgtgctaagt  ggggttcatc  agtacctgag  gtggttctag  aagcaggaag  gcagaaaaca      360
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aggaagagtt  tccggctggc  tcaggagctc  agggagctgg  cttcctggga  gagcaggaag      480
agggtgcagg  cctttcctgg  tgcccaccag  cctgacagga  ctttggcaca  ggaacacagg      540
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ccagtccgct  ctggttgtaa  ctcttggaag  ctgccacaat  ggaggcgatg  aggaggagca      780
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tgaccacttc  aaagtagctg  taggcgctgt  agttggtcca  cagggagctc  cgcacacaga      960
tgaaggcaat  cagcagggtg  accatttgcg  ccactttcag  cagggccgcg  tgggtgcggg     1020
ggtagctgag  gtccagcagc  ccctccaagg  ggctcgcgct  gggctgggcc  gcgccggccc     1080
cgggtccgag  cgcgctgccg  ctgctgcacg  tggtgcggac  gagcccggct  ccgtgcgaca     1140
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<210> 1288
<211> 1340
<212> DNA
<213> Homo sapiens

<400> 1288
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agtaccgagg  cccaggctgg  atgcagagcc  gggaaccgcc  tcctgtgtgc  ttcatggcca      180
tggtcctttc  tgcctgtgtt  ttttcttttt  ttctcaaccg  tctcttttct  ggctccctta      240
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ccacacgctt  cccgggttcc  tgcccgccca  gggcattgcc  acaggaagt  accacgccgc      360
ggtgctcacc  aacagcgctg  agtgggaggc  cgcctgtgtg  aaggcgggca  ggaagtgtgg      420
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tgctgcaccg  gtgcatgctg  gtgagcgagc  cacaggcttc  ggtgtggccc  tcctgctggc      660
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ctcctgcctc ggccctgaca aacgggatc tttaccca ctttgcactg attaatttta      840
agcaattgaa agattgccct tcatatgggt tttggtttgt ctttctggtc gtcagcgtgg      900
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cctgtcccag ccccaggtcc cgtgcagggc acctgcgtgg ctgacagcca ggctcttact     1140
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ctgcagggga cctgatttat agggcaagag aagtcacact ctggcctctc agaattcact     1260
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<210> 1289
<211> 656
<212> DNA
<213> Homo sapiens


<400> 1289
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tgctgggatt acaagcgtga ccactacacc cggcctgagt cacattgttc ttaatagcat      120
ctagaatggt gaatccttcc caggaggttt tcagtgtact ttgcccaaat ccatcagagg      180
aatggctgtc tatggcagct atagccttat aaagtgtatt tcttaaataa taaaactaga      240
aagtcaaaat tactccttga tttgcaagaa ttactgcctg gctgcaagaa tggatgttgt      300
gttagcaggc atgaacacaa cattcatctc cttatacatc ttcatcagag ctctgggtga      360
cttaggtgca ttgtcagtga gcagattttt gggttttttt gtttgtttgt ttgttttgag      420
acagtctccc tctgttgccc aggctggagc acagtggtgc aatctcagct caccacaacc      480
tctgcctccc aggttcaagc aattctcctg cctcagctac ttgggaagct gaggtgggag      540
gatcacttga gccgaggagg cagagattac agtgagccaa gatcatgcca ctgcactgta      600
gcctgggtga cagaaccaga ccctgtctca aaaaaaaaa aaaaaaaaa aaaaaa          656


<210> 1290
<211> 927
<212> DNA
<213> Homo sapiens


<400> 1290
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gcagatgggc gaaatgggtg tcatgtgttt gatatcatct atgcagaaat cattagagtt      180
ggctgcagct gcttggtctt tttctgtaaa cagccatctt gctgtcctca gatgctggac      240
agtgttaggt ctgggaaggt gggcagaggc atgatgcttg ccctttttcat tgtgctactt      300
cttatccctc ccagacaaaa tgaaaatcaa atgccgtttc cagaaggcct atcggagggc      360
tttggaccat gaggaggagg ccctgtcatc gggcagtgtg caaggtatgg gaagggatga      420
gcacaccatt ttaatgtgaa gccctctttt tccttctgat ctctaagtgc atagttccca      480
tgctttggct tacttccaaa acctctcttg gaatgctggg aatgaggaac tgtgggattc      540
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agctgaatgt gagttgaagg ggtgggttaa gcattctttt ggggctgggg ggagatggaa      660
tggtgttttg ctcttggtgt accacctgtt cttgcccca gaggcagaag ccatgttaga      720
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acttcttccc caggtaaggt aacagagaag ctgcgacttt gccttatccc ttcagctcgt      840
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aaactctcca aaaaaaaaa aaaaaaa                                          927


<210> 1291
<211> 1635
<212> DNA
<213> Homo sapiens


<400> 1291
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756

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cagtcagtgg tgtgggacc tgtgcctgca tcccatgatg ctgtctgcca ctgcccaaaa      120
tgtatgggtc tacaagtcac acctcccttg tcattcactg ggctctggtt cgtggtgatg      180
gcaaacatgg gatggcagcg aaccatactg acaaaggttg aggcccttca gcatggtgtg      240
cagcctctca gcatggacag tgggccctga agccactgca gctcactgtt cctctcccac      300
cctacaggag gtagattggg aagtggagct ggccgtggtc attggaaaga aaggcaagca      360
catcaaggtg aggtggaaag ggtgggctcc cagtccagag tgcagcagag gccccagctc      420
ctgcctctcc tagttctgac ctcactcacc aacacacggt gccagctgtc cctgacacta      480
ggaagcagtc agcctccttg ctccctgaca ctgcctttcc cttcacccac ctttggctgg      540
ctctggctac taacatggga taacagctta gagatccctt gccataggtg ttggtgtcac      600
ccatgatcta acctcctgta tggccaaatc ccctgccccc ataggccaca gatgctatgg      660
cccacgtggc cggcttcact gtggctcatg acgtgagtgc tcgtgactgg caaatgagac      720
gtaatgggaa acaatggctg ctgggaaaaa ccttcgacac cttctgccct ctgggccctg      780
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cattgcacag atgaacagcg cttcagggag gagcatgggt tcaggtacat gtggcacctg      900
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tcctgcggct gccacctctg aaacaatcta agttgagcat catggagcat agttatccca     1140
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cagagtcctc agcaaagtta aattgtgttt cagctgctct acttaagggg ggtagaacac     1440
taggaccacc accaacagta aaaagtgctg gttagccagg atgttcttac agtaatccat     1500
cccctgccag catccagtac acgaggcttc tctgtcccgg ctagaaccat tgcctcactg     1560
ctttatagat gctgagtctt tttttgcct gggtgacaga gcaagattcc gtctcaaaaa     1620
aaaaaaaaaa aaaaa                                                      1635

<210> 1292
<211> 1246
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1038)
<223> n equals a,t,g, or c

<400> 1292
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gggacgctgt tcctcccgcc gccactgccc aacctttcct gataatcgtg gcatgcgccc      180
tttcctcttc cctgccccac cccctggccg cagcaggcca gcactgcaga gtttgggtgc      240
tggtggtgtg gctgtagggg aggggagacc acacccaagg tggggggctgt ggccatgtgt      300
ggccgtgatg tcgatgatac tcgttttccc tgatccgtgg tgttgcagtc cgttgtcacc      360
agccttgttt ctagtggtgt atatatgtcg cccccgtgat gcatatatac acaggtatta      420
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caggggccac tggactattt gcaaggtgac agggactgga gccatggctc agaggtgatt      600
cgggcagcca gggacaggag ccaccctccc caggcccaac tctgctagct tcccagacca      660
cccccatcga gtgcggagtg agtgggagtg ctcaggaaaa gaaggtgatt tgtatttgtc      720
tccccgctga aaagaacagg attcaagtcc agagtttttca tcttcagcct gtgatctgtc      780
cagggaccct tgggatctgg ggcttcctgg cctggccaga gctggagccc ccacagggta      840
aggaagagag agtgggaggc agagtgtgat ggggaggagg gacaggaaga ccctttttaat      900
gatgagggta actatttcag ttgtgagcct tctagggccc caggctggga ggctcagagg      960
actgaatctg ggacctgtgt tcccccggc aggcagggac aagatggcat ggcaagcatg     1020
ggggcggggt gggtgggnag ggatgctgca tttctcagct gggcagtaat caatttaatg     1080
gtcctttaaa atgtctgtgt attaaaaatt taagaatacc cacttttaat attaaatatt     1140
cataaggtct agtatcttga taataatgta gatgttttaa taacaatttt tgtccttctt     1200
aaaataaaat gaaagaaact tgcaaaaaaa aaaaaaaaaa aaaaa                      1246
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757

<210> 1293
<211> 358
<212> DNA
<213> Homo sapiens

<400> 1293
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tcatttggct gtctttgtat tcccacaacc aagcatggta cgtggttcaa gaaatggctg   120
tttaatcaca gcagtaactc ccagtaggaa agattctcaa aggaattgtt ctttaaaaaa   180
aaaaaaaatt cacaaagtag gctgtaccct caaagtgcta aggagagctt ctgtcctcga   240
aaatctccct gaaatactga aagcatacaa aaaaggagaa agctcaaaac taaattttga   300
ctctcatggc tggggtttgt atctctttct ttaaaaaaaa aaaaaaaaa aaaaaaa   358

<210> 1294
<211> 779
<212> DNA
<213> Homo sapiens

<400> 1294
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ccccagagaa gacagtgaga ttctgtccct gagggtttcc ccacarcctg agtgatatga   120
tattccgact gagggaatgg aaacatcagg gctggtctgg ctgttgctgc tagagaagtt   180
gggagcaaag gcagccagtt agcttgctct tggaatggaa actgtgttaa ggaaaaaaat   240
tctgggaaac cagtgtcttg ttggaaagct ctcagctcag tccagacata ggatgtggta   300
agtcattcca ctctggatgc cactggcttc cttcaatgtt ttcttggctc aagccagcca   360
gatttattag ggttccttct aggccaagac tttgagggtg gggtttcatg tctagcaagg   420
tacatttccc atcttgcttt gctctgctta ttgggaaaag tcagcctttt ctgccgggcg   480
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caggagatcc aggccatcct ggctaacatg gtgaaacccc gtctctacta aaaatacaaa   600
aaattagctg ggcatgttgg ctggcgcctg tagtcccagc tactcgagag gctgaggcag   660
gagaatggtg tgaacccggg aggcggagct ttcagtgagc cgagattgtg ccactgcact   720
ccagcctggg caacagagcg agactccgtc tcaaaaaaaa aaaaaaaaaa aaaaaaaa   779

<210> 1295
<211> 446
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (26)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (441)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (446)
<223> n equals a,t,g, or c

<400> 1295
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ccttccaagt agctcagact ataagcacac gccccgttac tttgatgctc aaagtttccc   120

758

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aggtgtggcc atgggaggcg tcagtggctt ctctgttgcg tagggccatt ggtttgggtt    180
gctcctgagt ttctgttgct agatactctg tgctcgtctt gtatgttctc aaccctggaa    240
gcagccattt ctccaaggag cccttgttcc ctttagtgga gggtggtctg gatcttggtt    300
agaagccaag atcaagattc tgggtgtgct cacagctcta ggttgttagc agacagagct    360
ggaaagtgtg tatgtgaata caagtgcaca gttgtgggtg cgtctgtgta tgtgcgaata    420
catgcgtctt tgtatatgat naaaan                                         446
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<210> 1296
<211> 445
<212> DNA
<213> Homo sapiens

<400> 1296
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ggtaccgggt ccggaattcc cgggtcgacc cacgcgtccg ggaactgtga cttccccacc     60
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accagaatgg cttagtacag ctagggagct cagccagatc tcggtgtctg ctgtttgaga    180
ttgtgtggaa ggactattgc taagaagcag gagacagact gaacccagtg ttggccacaa    240
gtgaggactg agacccaggt cacctcttgg ctgaacatgt tagcttgttg gtaaatggct    300
ctgcagtggt tctgcatttt agtggggaat ttgttttggt tcattttggc attcccgcaa    360
ccatcttgtt ggttttttgg taaaatgtgg caccccytcc agacctytta gctgtggaam    420
tgagrtattt tagcagggtc ccgtt                                         445
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<210> 1297
<211> 1006
<212> DNA
<213> Homo sapiens

<400> 1297
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aggtttaggg gcaggtgcag tgtcaggagt cccccagcca ggccctggca ctagaggcca     60
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tcaactgtgt cttcctgttc tcctcttctc ccatcagcaa gctcaccccc tggcttttga    180
tgccagcctc ctttgtggtg tggcaggaat gtcctgggaa gagacaaggc ttgaccacgt    240
ggatggagtg ggaagacagg aggcactggg gacagcatgt ggctggggtg agctagtggg    300
cggtggtact ttccccaaag tccagagcac tgggtgggag cagcgctcag ctgtagggat    360
gtctggtgtg aggttcttct gggcacctgg cagagatccc aggtggcaac tggcagaagg    420
tccccagctc agagtgggcc ctgcatggcg ttgtatgctg gttttctttt gtgggcagga    480
cacctgcaag agggctacag ctggagaaat gggtggggar gagtggctgt tgacagctcc    540
ctgggcccag agagaattga gtcagaattg gggaaattgc agagcgagct caaaagcaga    600
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taagtttacc tccagtcaga gtgaaacttt gggcagcccc cgctccctac acgcagctgc    720
ccttcagggg aagtgagaat tggcccaagc cacaggtgac catgacagga ccttgcacta    780
gctgagaccc gagggtttag gaaattatat gagaaatgaa gcaagagatg attatctttt    840
gacagccaag tccccagatg gaatttagat atttgaacta ggcctaagga atgtctgtct    900
attaagtgtc tgtagaaatt tctgtcatct gcttgcactt gctgtttttac tctgctacca    960
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<210> 1298
<211> 1369
<212> DNA
<213> Homo sapiens

<400> 1298
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ccgttgaagg gaaactgcca gattttttgta agattcttcc tcctgggcac ctctaagata    120
ctgatggctc tgcagaggac ccattcattg cttctgcttt tgctgctgac cctgctgggg    180
ctggggctgg tccagccctc ctatggccag gatggcatgt accagcgatt cctgcggcaa    240
cacgtgcacc ctgaggagac aggtggcagt gatcgctact gcaacttgat gatgcaaaga    300
cggaagatga ctttgtatca ctgcaagcgc ttcaacatga gatatctgg    360
aacattcgta gtatctgcag caccaccaat atccaatgca agaacggcaa gatgaactgc    420
catgagggtg tagtgaaggt cacagattgc agggacacag gaagttccag ggcacccaac    480
tgcagatatc gggccatagc gagcactaga cgtgttgtca ttgcctgtga gggtaaccca    540
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759

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caggtgcctg tgcactttga cggttagatg ccaccatgta gggattatcg cgagtggttg      600
accttacact tactccttaa atagcagtga gtaatgcatt tgagctgtcc caggctctgt      660
ctcctcagct catttcctac tcttttctc tatataactc attctattaa atacattgca       720
ccaaagagat atggagacat aaacctgtaa tgaatgaggc tgggcttttc tgtaataagc      780
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ttatgtgtat ttatgtagta tttcaaacat ttcaaaatgc tttcatctat gtttatcaca      900
ttttaatacc acagcactta taatgatgtc actacatata gaagctcaaa gttaagggat      960
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ttatccaggg ctttttctac ttcatcacaa ggaatgtttt gaaagtgtct gctttttta      1080
tccttaaaat tcacctgtca gggaggcatt aaaaatttgg aaatgtatgc cagcaaaatg     1140
tgagctctgt attttttggc attcttatgt ttgggtttaa taagattaag aaaatgatac     1200
tgggaatttt cttttttcctg aaactttgaa tcaccctagt aagtcaaagt actaaaaaat     1260
gtactagatc attaagactt atgtgctctt actgattgaa agattttttg ttttccttgt     1320
aataaaggac ctaaaccgaa ggtacctgaa aaaaaaaaaa aaaaaaaa                   1369

<210> 1299
<211> 676
<212> DNA
<213> Homo sapiens

<400> 1299
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aaatgtcttg tgttgttttg ttcccctgcc ctcctttctc agcagctttt tgttattgtt      120
gttgttgttc ttagacaagt gcctcctggt gcctgcggca tccttctgcc tgtttctgta      180
agcaaatgcc acaggccacc tatagctaca tactcctggc attgcacttt ttaaccttgc      240
tgacatccaa atagaagata ggactatcta agccctaggt ttcttttttaa attaagaaat      300
aataacaatt aaagggcaaa aaacactgta tcagcatagc ctttctgtat ttaagaaact      360
taagcagccg ggcatggtgc tcacgcctgt aatcccagca ctttgggagg ccgaggcgga      420
tcataaggtc aggagatcaa gaccatcctg gctaacacgg tgaaaccccg tctctactaa      480
aagtacaaaa aattagctgg gtgtggtggt gggcgcctgt agtcccagct actcgggagg      540
ctgaggcagg agaatcgctt gaacctgaga ggcggaggtt gcagtgagcc aaaattgcac      600
cactgcacac tgcactccat cctgggcgac agtctgagac tctgtctcaa aaaaaaaaa       660
aaaaaaaaaa aaaaa                                                        676

<210> 1300
<211> 1061
<212> DNA
<213> Homo sapiens

<400> 1300
gctgggaact gcttgccact tccttggggc ctctgatttt aggttctatt atatcttgtt       60
taaattcctg aggtattgtg agtcagctaa aatgttataa accaaatcct attttcccat       120
ttacattttc accttaagat atttcgtctt cattccaacc ctctctctca aattggtaag       180
ccttaaacac ttcagcggtc tgggacagtt tctatttaaa gaagctcttt gccatctatg       240
tatagagagc gttgaatagc cattgttatg tttcagtctg tctctctcac atatttacat       300
tttaaatatg ggctttaaaa aatggggtgc agttttgttt cattcttctg cctttctaaa       360
tcctctccaa aattgggtgg cccttcttag gttgaaagct gttttctctt gttcctttt       420
ttctcatctg gattgcagat acatttcact agcaccattt ctccttactt gggccttacg       480
agggccttag ccaaattcca gcccgtgcct ccctctacca gtggtgggca caccatctgc      540
gacattctcc tccatcttcc ttttgtgaga taagaaggta gaattccata tgacataaga      600
attccacggc tttcacctcc taaatgctca tctgtctttc ctcctccctg caaatgttga      660
ctttcaatgg ctttcaatct tctttctca gtcactactt ttttttttt ttttgagacg        720
aagtccagcc tgggtggcag agtgaggctc catctcaaaa aaaaaaaaa aaaaaaaaaa       780
aagcactttg ggaggccgag gtgggcgaat cacggggtcg ggagatcgag accatcctgg      840
ctaacacggt gaaaccccat ctctactaaa gatacagaag gttggccggg cgtggtggcg      900
ggcgcctgtg gtcccagctg tttgggaggc tgaggcaggg gaatggcgtg gacccggggg      960
gcggagcttg cagtgagccg agatcctgcc mctgcmctcc agcctgggtg acagggtgac     1020
agagcgggac tccatctcaa aaaaaaaaa aaaaactcg a                           1061

<210> 1301
<211> 2046
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760

<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (63)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1670)
<223> n equals a,t,g, or c

<400> 1301
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tgttgctgcc tgcagaagct cagctcagga agacttccag gaacctgagg aggagctgcc   180
actaacagcc atatttccca atggagactg tgatgacctt ggaaggggggt caaaagcctg   240
tgatggagtc gtacacactc ctgctgagcc caccggagac tcaagatgaa ggctggaccc   300
ttgcgctgtc cctggctcta acctacagac tggggcctgg ctccgtctta ctggcccccca   360
ggtctccatg gagactgcag aaaccccgc ctgctggagg cctgccacac tcacagttac   420
cagctagaca gtggggctta ctaagacaag caggacctaa aacagtgtct cccctgggaa   480
cctactcccc acccagcatt tgctaagtct gatcacaggg aggttatttt gtctctctgt   540
ctcggtttct ctgagccact gagacagatg gctgtccgct ttgaggctct gcagagytgt   600
ggcaccccat ggtgtgtctg cagtgttctg ggcacatgca tgggcaccca tcgttgagag   660
tgcagctggg aagaactctg aaccagaagt catcagagct gaggcatggc cttgaacatg   720
tcactcagtc tctggggctt ctgtttcaca aatgcatgag ggggccacca gcccagtggc   780
tttaaaccag gggcaggttg tccctccagg cagcattgga aatgtgtgtg tgttgagggg   840
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tctctgacag caaagaattg gtccattcaa tgccaattgt agtacctttg agacattctg   960
gctgagcaat gccttctccc tgtcagagtc ccccagagca gagagggtca ggcttccctg   1020
gaccttggct cccagagcaa gccaaaataa agactacact gttgccttgg gggcttgtcg   1080
ggccagggcc aagacggtct gcgtgctgca gggccaggac agaaatagcc acacatgccg   1140
gtgagaacaa agagcctctt tctttctcat gttgacatcg actttctgtg ccaagtcctt   1200
tgggtataag gatgctaggg aattcctata ggcaccaaac agaaggaaag ctaggggctt   1260
ggactactgg gtataggact tgctctagct ctcaggtcct agcccaagct caatgcaaac   1320
acagcccctc cggctctctg tttctgtgag gttctggaat cccttcctct gtgtccgtga   1380
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ggaactcacc attacctccc ttgtcttctt tgcctgcctt ggagaaatcc agagtcttcg   1500
gaatggcaaa ggcagctcct ggatttccct ggagggggagg cactagctga gggaagtagc   1560
tcccttcatt catgatgcac agtttacgca gcagacacac aactgtgcct actatttgct   1620
cggtgccctg caaggtgctg cctaactttg atttgttatt tcaasctmtn ctcccataat   1680
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ggcatctcat ttggggcttt ttggcagtgg gcctcatttt aatcctgcag ggctgcctgc   1800
cagtggatct atccagctgc ttccttgtag ccaagaatga gttcaatgaa ttgtgattca   1860
ctgattttat tgattttgtt ttaaaacagg gagactggta tttttgaagc tgctatcatt   1920
ttctatttct ttattaattt ctttgtaatc atcttattaa agttttctta tttagtggga   1980
gagggaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   2040
actcga   2046

<210> 1302
<211> 577
<212> DNA
<213> Homo sapiens

<400> 1302
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taaccaaagt ttgaatttta ctgattgtac actcatgttg catctttctt cattccttgt   120
atattttgca aattggttac tgaactcaga gacttggtca gactctggtt cggtctcttt   180
agcaatactg taggcagtgt tgtgttcttt catggggagg cagaagtctg gttttctctt   240
tttttttaaat catgtccgca gttgttgggc tcagtgccca gatccattaa tttatcaatg   300

761

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gtttaaaaat agtgacattc taattgtgtg ggtttttta aaatttttg ttggaatact    360
tttattaaga gatgcttctg cttacctgct gttcagttat ccagtggcac agttatatag    420
gaaaggtagg atatatactt gattctttgc ctttatttat tcttttttca aaatagtgac    480
ttagttccct attattctct aagagaacca gctatttaat ttaatttaat taattaattt    540
ttttgagacc ctgactctta aaaaaaaaaa aaaaaaa                            577


<210> 1303
<211> 2108
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (34)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (41)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2045)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2075)
<223> n equals a,t,g, or c

<400> 1303
atccntaatc cggcacttgt agaagtcctc catngagttg nccaagttcc tagattagat     60
ttggttagca cctttgcaga cttcaggcct gatgtgtgtt tttcttagta caccatatca    120
ggaggcacag atatggatca gttctattac tggttatgtt aacttcagct tggttaagat    180
ggtgtctgcc aggtgtctcc attgtaagtt attcattttc cctttacaat taataagatc    240
ttgtrgggwa gaaagtaatc tttctttaaa taaagcagca atagaatgag agatttttaa    300
acatataaaa agcagaaaaa tataaatgaa tcaggagtaa agtaacatta aaaattggaa    360
tacatttaaa gaaccatcta ctaatttcta accatatatt attttaata atggtcttaa    420
aatttctttt tctatagaca ccaaatctgg ctgaatgaaa taaattggtg ataagtggaa    480
aaaagagaaa aaccaatgat tcataacaat gtatgtgaaa gtgtaaaata gaatgttact    540
ttggaatgac tataaacatt aaaagaagac tggaagcata caactttgta catttgtggg    600
ggaaaactat taatttttg caaatggaaa gatcaacaga ctatataatg atacatgact    660
gacacttgta cactaggtaa taaaactgat tcatacagtc taatgatatc accgctgtta    720
gggtttttata aaactgcatt taaaaaaaga tctatgacca gatattctcc tgggtgctcc    780
tcaaaggaac actattaagg ttcattgaaa tgttttcaat cattgccttc ccattgatcc    840
ttctaacatg ctgttgacat cacacctaat attcagaggg aatgggcaag gtatgaggga    900
aggaaataaa aaataaaata aataaaatag aatgacacaa atttgagttt tgtgaacccc    960
tgaacagatg gtcttaagga ygttatctgg aactggagaa aagcagagtt gagagacaat   1020
tctatagatt aaatcctggt aaggacaaac attgccatta gaagaaaagc ttcaaaatag   1080
acctgtggca gatgtcacat gagtagaatt tctgcccagc cttaactgca ttcagaggat   1140
aatatcaatg aactaaactt gaactaaaaa tttttaaac aaaaagttat aaatgaagac   1200
acatggttgt gaatacaatg atgtatttct ttattttcac atacactcta gctaaaagag   1260
caagagtaca catcaacaaa aatggaaaca aggctttggc tgaaaaaaac atgcatttga   1320
caaatcatgt taatagctag acaagaagaa agttagcttt gtaaacttct acttcatttg   1380
attcagagaa acagagcatg agttttctta aaagtaacaa gaaaggaac aaaaaaaatg   1440
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762

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aggtttgaaa  tcttttacca  tggcaaaaca  ttaacatctt  tctcaaaaac  atagagaaat  1500
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gtaaaatgtt  tccttaaagt  gttcttggga  tgaaaatgat  tgtcatgtct  ccaacaacag  1620
tgaactgatg  ttgttccttg  gaataaaagt  caatccccac  cttaaaaaat  gtatggcttc  1680
tttgaggaat  tcttatgtct  taaagacttt  ttacattcta  gacaattaaa  ttgattgagg  1740
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tgtatcatat  atgtgtgtgt  gtgtgtgtgt  gtgtgtgtga  tatataaaat  1860
aaaaaamtyc  ttctacttgt  actttggcat  tcaatttta   gaaattcagt  ctcaaatgcc  1920
attatggtat  ttttcaaatg  atacctttaa  gtcaatggtt  tctttcgact  gcaatagaga  1980
agatatggca  agaaaaatgt  tgcagtacca  tcttctggga  gaacattcat  gaaatccttc  2040
agttntagtt  ccacagcaac  aattgacaat  gtttntttta  atgatgacag  gtagagttga  2100
tacttctc ,                                                            2108


<210> 1304
<211> 1026
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (971)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1003)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1004)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1007)
<223> n equals a,t,g, or c


<400> 1304
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gggaatttgg  gagggcagga  cagaagccaa  atccaggccc  tgagcaaaca  gaacgctaga   120
tgatatcgtc  agggagcagc  aggtatgcag  agacctggga  cctactcctg  tttctgcgac   180
tgacatgctg  tgcacactgt  gcatggaccc  catggcacga  tgcaggacgg  ggctgcagaa   240
cccacacaag  ctttgaggtc  agacagtcca  cgaatcccag  ctctaccacc  cacagctttt   300
cctcttctca  gctgtgtggc  cttgggcaaa  ttgcataacc  tctctgaaac  tactgtcata   360
tctttaaaat  gagtaggaaa  tgagacctcc  tttgcaaggt  aattgtgagg  attaagttgt   420
gagggttaat  tgttctaggt  gctttcaccc  agaacaatac  accagcatat  aaaactgacc   480
tccaacaaat  atgaagtcac  tttatccttg  tctggcctgt  tctgcctctt  caattctatg   540
caatgaggca  taaaaactcg  gatgtcctgg  gcctccacgt  tttacatgta  taaaactggg   600
gtatcctgta  atcccagcac  tttggggggc  caaggtgggc  agatcacctg  aggtcaggag   660
ttcgagacca  gcttggctaa  catagcaaaa  ccctgtttct  actaaaaata  caaaaataat   720
tcgccgggcc  tggtggcatg  cacctgtggt  cccagctact  caggctcctg  agtaacttgg   780
attgcaggca  catgccacca  ggcccagctg  attttttcaa  attgtctcac  tatgttgccc   840
aggctggtct  caacttctgg  gctcaagtga  tacttccacc  ttagcctcct  attagttttt   900
cccttacagc  aattcctgca  atatataaaa  ggtctttact  tcaagtgagc  tgtgaatgca   960
ccactgcaat  ntccagcttg  gcagaggatg  acagagaccc  tgnnttncaa  aaaaaaaaaa  1020
aaaaaa                                                                 1026


<210> 1305
<211> 1103
<212> DNA
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763

<213> Homo sapiens

<400> 1305

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ggcacgagtg aattttttta aaacaatcta gccatcatca aggtgctata agagttgtat      60
aaaagatatt tttggcattt ctaggcaagt atcagccaat aagtatgtta gtgatatcac     120
agattgtacc aactattaac tatgttaaat aagtattcag tttcatgtga tctctgggaa     180
aaaaatatgc tgccttggtg ctaatattgt atgtatttaa atgatcatcc gactcagaaa     240
tataaacact tttaatgaaa gggaggaacg gaaggacaat ttccagtgca cagaatcact     300
tggatgaaat aagaccagct ctttaccctt attttttggat atgccttttt tggaagagac     360
ttagacttta tccttattgt tgttagtgtt gttaatattc gttgcttcag cccacggtgc     420
cttggtctct ccacaatcaa atggaggatc ccccaagcag cttcattaca gagtgatatt     480
gggaaagtga gatcctctca ccattttgcc aagatactct aaaatgacat ccaagtttac     540
cagtagaaag acacaggatg cacagaatgg gcatgacctt cagctcacga gcacacctgg     600
agaaattcag aaccaggttc tgaatcatca cgattgcctt ttgcatgaaa acatcggctg     660
gtgatgtgac ttctcttcag gccatgagcc taacaccctg ccggttttca tgcccgctgc     720
agtaatggac gtttgtgtga agaaatgaac tgtggagtac aaaatgcttt gagtctttcc     780
gattgctcat taattcactt ttttgttact tctttccaaa atggaagtgc tgaagccatg     840
gtctttctgc ccctccaagc tgatgaaggg aagcctttgc caatggccca tggaagacac     900
ttggtttgag aaaccctgcc cacttccaaa gaccaaagag attaggaaaa gcctggcagt     960
attctccaac tccaaacaag ctctagagtg ctccaggaaa agttatattc agtatatgaa    1020
taagtgttat tctccattat taatgtgttc tgaaaatata ttatgaataa atacatcacc    1080
acacccaaaa aaaaaaaaa aaa                                             1103
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<210> 1306
<211> 1421
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1267)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1297)
<223> n equals a,t,g, or c

<400> 1306

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tcaggtgtgt ccaccatatg ggcacaggaa gcacaagaga gggcaggccc tcctaccacc     120
caactgcaaa gaagcaagga agtgggggga aggggatggg atacaatgac tgactagcct     180
gttgaggtgt agtgatcctg ccccagagtg aggaaaggac acagagattc tccttccaca     240
ggtaggggtg tcttccagtc ctgggtgaag aaaacattta tgcatagcac cctgctcata     300
gcaggggttc cacagttcca gcagtaatgt ttgagataag gactgctctg tcgttgaggc     360
ttatccccct ctttgtgtct acatgtggag ttacccagaa ataagaacat ctgggttctt     420
aaaaagtagc atcccaacac accaactttg atgcccactc cctccttcga tgctcaactt     480
tgccctcagc tataggagat ccgagaacag tgactattcc aagactaaaa cctgactccc     540
tccttggtac attctaattc tcctcaacag caccactgag taacaaggac actgcctaag     600
gtaagtaagg gtcctcaatt cccccccaagt ttactagcac atgcataaaa tattattaac     660
accatgaatg gaagaggatg acgggataaa agaaattagg cttaataaag tgaatgtcta     720
taaaggaaga ccagatcctg aaatgaaaag gcaaaactta tttgtgagct ttggttaaat     780
ttatcatgaa aattacactt attaatgttt tattgytatt aacagcatcc gaacaatcct     840
catcttttga agatgccagg agcaattcgg aatactatct gattgaatgt gaacctgcct     900
ggttaattta ttacctgatt tgatgaacca aggaaagcca tgcktttaaa caaatattta     960
catttaatat gggaacataa aagagcttta aatattatag actttgtacc tgttatatat    1020
atgaatattc cctatgttaa ataataataa taactagtgt ttatgaatag aatcatatca    1080
tctttagaaa ttgtttaaaa ttagttctgg gaagttgaaa gtggggaatg aagagataat    1140
aaataaaact agattggcca tatgtttata attttttwag attgggtaat gaatacatgg    1200
agtttcatta tacttttctc tccacttttg tctatgttga aaattttctg ggagctaaat    1260
gatgagnaca catgggacac mtgrtggggg acaacanaca ctaaggcctg ttgaggcagg    1320
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764

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gagtcggcag agagagagca tcaggaagaa tagctaatgg atgctgggct tcatacctgg      1380
gtgatgagat gatctgtgca gcaaagcacc atggtacatg t                         1421


<210> 1307
<211> 845
<212> DNA
<213> Homo sapiens

<400> 1307
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ggcctgagat ctcagcaggc cagacaggca gcagatgctt gttgcttttc ttgtgttata       120
tttttcgttc ccttacttag catttgtggg accaaagcca acaaacaaca ggttgttaaa       180
agaatgagag taatttgact tccgacagtg attggggctc ggggttgttg ggtgttttgt       240
tttctgattt gaaactagct gtatggtaac cactaactct cgccttattc tttaatggaa       300
ttttggaaag gcctcactcc agtgactctt tggatctttc ttcyctaagt agatgggaag       360
cctgtaagaa gagacttgga ggcaaagcaa agggaatcag cacttaaccc tcacccaaag       420
ggcccaagag aatctttagt aactggaggc agagcagact ggagcctcta yggggcatct       480
ccccatattg gagaattcag tctttgtttt ggaaatctta taatgtcttt ggagaggctt       540
taaataattt tgtttttctt agcaatgtta tgctctattt tgagacatgg attttttttt       600
tcttctagtg tttctctcct gaggcaaagc ccaacacacc tgtcttttgt ccacttctcc       660
agcaaattag atttgtctct gggaatgtgt ttgtaacata ccaacctact gcagaccagc       720
agagggagct cccatgttga atttgtttgt tagctatttt ccccccttc acaaaaacta       780
tttcttgacg acctttgaga gatttcaata aaaatttaa tcagagcaaa aatgaaaaaa       840
aaaaa                                                                 845


<210> 1308
<211> 1781
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1363)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1377)
<223> n equals a,t,g, or c

<400> 1308
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gatagtgaat tttggtctgg gtaatgaaaa gtaggaatat aattgattgg aataatgttg       120
tcatatgttg ttttaatgtt tatcttaaaa ttagtaactt ttccaaggaa aattttattt       180
gatagcataa cttctctgga tattatttta aatcagtctg gtaaagagaa aaaatacaga       240
aagtattata atttgtgttt tcatcataaa atattttgca tcagtatctt attgcagtac       300
ggtaggagac tatgagaaat attttgaatc ttaaaagtac cagataaaga cacaataact       360
aatgattttg tctttaggag ggccagaact aattgatcct gctggtctgc cattacctca       420
gccagctcag tcctgggtat ggcttgtgga tctagaaaga mcaattgctc tccttattgg       480
gcggtgtctt ggtggcatgc ttcagggctc ccctgtgtct ccagaggaac aggacactgc       540
atattggatg aaaacgccac tgttcagtga cggtgtagaa atggacactc ctcaattggg       600
taatgtgctt ctctgcagca tttaaaatac atgcctgttt gtacctcagt tggagatttc       660
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ggaatctggg gctatgactt ggagccctaa gaaaaatggt taaatcgtgc agcacaatat       780
ggtgaaaaga gcccccagag gaaatagaaa ttgtaggtct ggtcctactc tgtcatattt       840
atcactcatt ttgagcaagt catctaactc aatgcttcat cacttatttt ccgaggcttg       900
gaggttatga aactgcttcc cagaatgtaa agcactgtaa gagtacttma ccatgactta       960
tcagtgcmgc acccctgaga tgtgagtggc agcctctttt cctcccagcc tgtcttgctt      1020
tcatgctgac attatattat gtcctaattt tttcttcgcc acttaaagtg cctttagaat      1080
ttcccttctg cagcatctcc catttgtata tattgstggc aggctagwwc ctagactgar      1140
catgaagact tatctggtac cccagataat ccagttgktt tatctagaat tggtccttta      1200
```

765

```
atctctctag gcttctaawt ttgattctat aaaataatga tttggattag acaggctaca      1260
tgatattatt agatctaaaa tttattattt ctctgataag acaaagagac tcaacatgtc      1320
cctgaaggaa agtctaagag agactgagag gaaagaagga gancggaaaa gaaaagnaaa      1380
aacaaaacaa aatgagaaag attatacttt gggatttgga gggttggaga gtgggagtga      1440
gggaagcagt tgaggatttt cctccatttc caaatatgag tgtacattca tcatttcatt      1500
tatgaaccag aaagtgattt tggccatggc tggtgaatgt tggactggtg tttatgaaac      1560
attttgttaa agaaagtaaa atcatggttt ttcaaggggt ytttaacatg ataaagataa      1620
ttccactgct gtcagtgttt aaccttgtga cagtcctaaa ggacctcctg agaacaaaag      1680
tatctctatc tctaccctct tcatatttct gttatattta ttcaattaaa ctggcccttta     1740
atatgaagaa aaaaaaaaa aaaaaaaaa aaaaactcga g                            1781
```

<210> 1309
<211> 919
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> n equals a,t,g, or c

<400> 1309
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ttacttaatt ntactgtcat accatgctat tacctacact cctgtgtgca gtgggcattc       60
agtaaatgtg tgttgaagga ctgggacgta cgtggaggct gctggacctg gtcagagact      120
gatgtgcctt agcggcaatg gttagagctt ttcagtgcat cccacctccc tgtcgccccc      180
atgctcggct tcctcacatt caggagcctg acttggatca gacttggggc tgcacagtgg      240
agcaggtggg ttcccgtgtc attagtaata aggagagggt tgggggtggg cagggctcca      300
gaaagtcagc agtgtgcctg ggcacccacc ccatcctcta cctgccacac ctcagagggt      360
tcctacagct gcacacaagc agttgagagt tgatgaccag gcccataggg ctcccacagc      420
tggttcccag gccagtgagt gctgtgagaa tacagtagca caagtccttg ttctctgaag      480
agtgggaagg agaggagtga gtgaagtagc ctgtcccctg caggtcctct gcgatggcat      540
tgtctcggtt cccgcagtgc tgcagtgtgg aagggagtgc cccatcctca ttacagatga      600
cacactggag tgtggagggg tcgatgactt gtgcagggtc atatggtacc taaggggcag      660
atctcagact taaacacaat tgatgtctaa cccctagaca gtcttttttag tgccctctgc      720
tctcagtctt gttgccctag tatcaagcaa tcttagacaa acatcctgaa ttcttacaaa      780
cttacctcta aactctgagg ataaagttgc cagtcctttt aatggtcagc ctaatcattc      840
tgtcagccta atcgggtaat tgcttttttt aataaataca cataaaaacc aaaaaaaaaa      900
aaaaaaaatc caaggggggg                                                  919
```

<210> 1310
<211> 495
<212> DNA
<213> Homo sapiens

<400> 1310
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ccacgcgtcc ggtagatctt aactgtactc accctccaa tacacaccat acatgcacaa       60
aatggtaact gtgtgtggta atggctgtgt aatctgtggt aatcacaaat taatgtatat      120
caaatcacca tgttgtgcat gtttaatata tgtaattttt atttgtcaat tatgcctcac      180
caaagcttgt gggtggggggg aataatgaac tctgatgtaa ggtatggcct ctgggttatg      240
atgtgtaaat gcaggctcat cagtcccaca aatgtcccac tctgggggaa tgtgagaatg      300
gagactgtgc atgtgtgggg gcatggggta tatgggaact gtaacttccc ttccatttc       360
tgtgaagtta aaactgcttt tttaaaagtc tgtttaaaaa ataaaaataa aatgaagaat      420
gatgaccgtg ctgaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa      480
aaaaaaaaaa aaaaa                                                       495
```

<210> 1311
<211> 1483
<212> DNA
<213> Homo sapiens

<220>

766

<221> SITE
<222> (508)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (711)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1021)
<223> n equals a,t,g, or c

<400> 1311
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gaattcggca cgagcaaaca cagtttcaca ctgattctta acattttgtt caactttttac      60
tcagagggca ggctgagcca gggagcaaaa aggcaaagga ctcctactca catacccact      120
tagcaaaacc aaagcacctt gggctttgaa cccacccttc ttagaaggca ggtttggggg      180
ttgaggcccc ttgagaagct cacttcaccc tctccccatg ccatcccatt cctacccatc      240
ccaagatgct tctcttgtat ttctttcagc acatccagcc atctccctgg ggagcgtttc      300
atatctgact ctttatactt ccagtgatgt tttggcatcc ctaatagact ggctcccaag      360
gcagtcttta atcaggagtc ttcccctaat ctagctcctc aagaacccaa gggaagaggc      420
acaaagagaa gtatgaatag gaagatagaa gggtaaccca gtcagagagg gagtggcaga      480
tgacactgct gaaaaggagt ttccaganag ttgcacacca tgagccacgc tgtctgtccc      540
tgaccacaac ctccactggc caccacctcc tgggcttccc ctccctccac ccacagaaac      600
cattgctcaa tctcaactgg actcttgmag gcctatytct mcctccaaac agagaytcct      660
ggacacagag ctgcagacct ctaaccactc ctggaacata aaaaaaacca nggtggttct      720
acagcattta cacctccagt ttccctcaga cagaatccag aagagaagaa cctcgctgat      780
ctctgagcgg agcatgtctc caagctcagg ccagccccaa aactccaatg gcctcaactg      840
gagtggaaat ccctcaaagg cacaaaccca gttcctacca tctccctcag tgcctggcaa      900
tgtttgtggt tggttgagtg agttaacagg agaccatctt ttggcctttt ttctacctct      960
gttttctctt actatacttg cctacatctc atcttctggt caacaccagg tactcacccc      1020
ntgagcttct tgtgaacttg tctggggccc accggcctaa acatcatctt ttttgtttgg      1080
aattaagctt tgttgaactt ttcacaggtt tcattatgc aaatgcctgt gatgggacaa       1140
aaaggtctgc aaacatggaa acctggtcta aagatgtcca aagtaaactg tctgtggagt      1200
cgaatgacat ttgagccctg gacctaaact ccaaatccaa gctctttccc actgtgacct      1260
tgggcctctc aaggctcagt ttcctcacct ataaactgta gagaagccaa twacagactc      1320
atccacacta tgaggctgtg cataaggtca tgtatgtaaa actacttgct ttgttgatca      1380
ttctgtccca gataagtatg aattattatg catcatttca ttaaacaaga aagcttcact      1440
gtgttaatat gcacaagtaa aaaaaaaaaa aaaaaaaact cga                        1483
```

<210> 1312
<211> 1332
<212> DNA
<213> Homo sapiens

<400> 1312
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ggcacgagaa aaaacattaa gacagaactt aaaaacaata gattgactat aatccaaaga      60
cgagtgtacc tctaaccaca attttcattt atttttaaat gtttccttca tggcctttct      120
tgtggctcac cctatgcagt ttgtgtattt gttgacaact ttatgtgttt ttaatatggt      180
ttttgccaaa cttggttttt ccgagaccgt cttttctcag aggctcagtt ttaccgtcct      240
atctgcagtc ggctactttc agtgggcaga agaggccaca tctgcttcct gtaggccctc      300
tgggcagaag catgcgctgg tgtctcctcc tgatctgggc ccaggggctg aggcaggctc      360
ccctcgcctc aggaatgatg acaggcacaa tagaaacaac ggggaacatt tctgcagaga      420
aaggtggctc tatcatctta caatgtcacc tctcctccac cacggcacaa gtgacccagg      480
tcaactggga gcagcaggac cagcttctgg ccatttgtaa tgctgacttg gggtggcaca      540
tctccccatc cttcaaggat cgagtggccc caggtcctgg cctgggcctc accctccagt      600
cgctgaccgt gaacgataca ggggagtact tctgcatcta tcacacctac cctgatggga      660
cgtacactgg gagaatcttc ctggaggtcc tagaaagctc agtggctgag cacggtgcca      720
ggttccagat tccattgctt ggagccatgg ccgcgacgct ggtggtcatc tgcacagcag      780
tcatcgtggt ggtcgcgttg actagaaaga agaaagccct cagaatccat tctgtggaag      840
```

767

```
gtgacctcag gagaaaatca gctggacagg aggaatggag ccccagtgct ccctcacccc    900
caggaagctg tgtccaggca gaagctgcac ctgctgggct ctgtggagag cagcggggag    960
aggactgtgc cgagctgcat gactacttca atgtcctgag ttacagaagc ctgggtaact   1020
gcagcttctt cacagagact ggttagcaac cagaggcatc ttctggaaga tacactttg    1080
tctttgctat tatagatgaa tatataagca gctgtactct ccatcagtgc tgcgtgtgtg   1140
tgtgtgtgtg tatgtgtgtg tgtgttcagt tgagtgaata aatgtcatcc tcttctccat   1200
cttcatttcc ttggcctttt cgttctattc cattttgcat tatggcaggc ctagggtgag   1260
taacgtggat cttgatcata aatgcaaaat taaaaaatat cttgacctgg ttttaaaaaa   1320
aaaaaaaaaa aa                                                        1332
```

<210> 1313
<211> 1676
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1669)
<223> n equals a,t,g, or c

<400> 1313
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tattaagatt gacaggtttt tscacatttt tggaaatgtt taatttgtac actgatttac     60
tactctracc aataattgtt gatgagtgta tgagcatcat gaatgcgtgc attgaactac    120
tgtctgtgtc tttatgtttt aacttctttc aagatgtagc catcagttac tgcactgcta    180
ttactgactt aaatggacct ttttsctttt acaaactata cttatctatg gttctttgtt    240
gaagaactca ggagttcgac attaatagaa attagaaaat tttataatgt attataaat    300
ccattactaa gttgaaagta tgcttttaac tctgtgtatc aggggatgta tgtttgtgtg    360
gagatgtttt tttctgtctg taggcacatg tatatatccc agtaagttct tattttcatt    420
tcatttctac atttttatga acttgtttta taagggtact gtttagttgt gataattaaa    480
tatatataaa agctttctga gagattattt actatatgaa tatattttca gctggctgat    540
caaaagtatt tttaaaattt tgyttttagc cattcaaaat gtatttgtat tttcagaatt    600
gaatgcaagt catacttaga gctcaattaa aatactcttg caagaaaaag cattaaattc    660
tctttgagaa ttccgtgaaa tgcaaattaa gggaaaaata ggttttaagc agtagcaaaa    720
acacaccgct aaaaatggcc tttgaattct cagagctatg gaaaaatgtg agaaactaaa    780
ttgtctcgag atgtcaagat tttctatct ccagttgcta ttggcctgtc ctactgttgt    840
ctttgaatat ttcctgtatt ccaccccaaa agatttcaac ttttagtttt tctatcactg    900
ggcaaggtca gactgggttt ataaaacaat atattggcat attgtgattc tttgtaattg    960
actataaatt ggttttgaaa tgtccaaaca tacgttgtgt gtctttatat tgtactgtgt   1020
gttttaagta actggcagaa aaagaattgg aaatgaaatt tccaatcaga caatgtagta   1080
ttaaagaaaa ctttgtttta aatatgcggt accatgtaaa attactcgtg ttaggaataa   1140
agtccactgt tgaagttgaa tgtcactaag cttattatgt aaaaggaac cagtgtgatt   1200
aggaaaacct accagaagcc agatacagtg tggtacgtgc aacatttcat gcacattttg   1260
attttgtttg tcattcaaaa ttgtgcttgt aaaaatgtat acaatttctg agttttataa   1320
tttctaggta cttgtttttt cttgctggta aatagctttt ttttaaaaaa aaatctaata   1380
taaagaaac catgtttata ttttgttagt gatcaatgac tttgtttata tggaaatttg   1440
tatattgttg gcacacattt tgttgaggtt tacgtgcatg aaggcctgca ataattagca   1500
caatgaaaac tgcttttct tacatgttca ttttttgaa agattgtggt gcaaaggctt   1560
actctaataa gtaaccttct ggactatgga atgaatataa atgaatggca ctttgagtgt   1620
taataaagct aatatttatt tccacaaaaa aaaaaaaaa aaaaaaaana aaaaa         1676
```

<210> 1314
<211> 947
<212> DNA
<213> Homo sapiens

<400> 1314
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ctgcaggaat tcggcacgag gaagctttga taacataaat tgcttgcctg ccatttaaca     60
attttttgaaa tgaattattg tctaaatagt ttcaatatat gtttttatttt atgaatttaa    120
caaaattctt ttttcttgat ttagctaatt ttaatagagt gttttcttat caaacattta    180
cttatcttct aaaactccat tcttgcaaac tgtttggagg gatttgtttt tatttttatt    240
ttgtagtata gctcatgtat ctagaataac ttgttatgtt tattatttca tcatcataaa    300
```

768

```
ttggcttata tttcatatgc ttgcagacat atagaataat cgaaaacaac aaaattatat    360
gtatatacat atgcatacac acatatgtaa aatgtgaatg ttttttatgt tttgcctttt    420
attacacgtt ctgccttta ttacatgttt tgccttttat taaatctcac tttgctcttc    480
ctcattcttt tcggggagac atactttttc ttttaaattc tactactggc tccttacaaa    540
attaactatc ctttaaagtt tatttattaa atttatagag tcaagtttga aaaattgttt    600
tatttcatcc tttatgcaac aaggtattta ttatactttt atttttcatc atctgtgaat    660
atttagagcc aaattttat ggtctttgtg gttttattct tgctatatta tctctgtctg    720
gaatatttat ttatgtatat atttattaaa taagatttac ataaaaggtt gagccattta    780
ttttagaatt aattcaaagc tctttggatg taatttattt ctaaggcttt gttattctta    840
agttcttaat tttaattcct atcactgtga tttagaataa agtgatattt cttcaataat    900
tgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa actcgag              947


<210> 1315
<211> 1744
<212> DNA
<213> Homo sapiens


<400> 1315
ggcacgaggt cagagaggct accagagtgt gattcattct gcctctgtcc tccccatccc     60
tgctccttga cctctcccag acaccttggt gttggtcttg tgccagggta ttcccagggc    120
tgaatgatgg cctgtgttgg tttttttgtt tgtttggttg gtttgtatgt ttgttttggc    180
acagtgtgaa ggggtcgcag actttcactt attatttgct gagttgtcca tgactgatgt    240
ccatttctac tgggtgatcc accccaacc ctttctaaaa ggctaactga tctttcttg    300
cttctgtacg ctctctttcc ctctcctccc tctcttttct taatttcagg gactccttcc    360
acagatctag tttcaggaaa tgtgaaaccc agttgtcaca gggcagctaa gaaaagccat    420
cttcattcgt ggagactgtg gccctgcaac cctggagaag gacttgctgg tacttaaaaa    480
atgggacatt tgccacccag gactgactgt acactccctg atcagccagc actctggaag    540
ctttgggatc ccaggaacca tggaattatt cccaaatgga ctctgaccag attttttgcca    600
tactggggggg tggcgggatg gaggatgggt actcaggcat gactgcgtat ttattaaagt    660
gtgtttttcc acaatgtacc aaacaaggca taagcagctt ctcctgctga ctggccaatc    720
actgcccatc tgagagatga tttcctctgg cccatatttg aatttattgg agtaactcaa    780
attgcctgag gaaaaatgga aaaattatcc accagtcgat tcaaactgaa tttcactctt    840
tataggaagg cagggcaaac ttgtaggagt acgaaacatt ttcaataaat ctacaaaggg    900
aagccttact acaattccaa aaatcatcat ggttggaaat ttgggaggag attatttgtg    960
aacttgttac ccttttggta atggtggact aattgctgta tagttatttt tgttttatta   1020
ttactgttac attaatttaa catgcattta tagaagaata cattcaaagc actgatgtag   1080
gagatacacg gtacttggag cagtcagcca raaatcacag atactgcttt cacttaaatg   1140
gaaacaattc tccgataatg ctttgctttt tttcttatgt cactcttgtg tactatctat   1200
ttttctcctc tctgggacca agtttctttt tataaagcaa taatatctct gttttcattt   1260
cagaacattg tgctgtctgt cagcatatgt atatcagcta caaaatatat tcaactttga   1320
cttcttttga caaaggactt taggaaaaag aggaacaaag acattatttg agaattaaat   1380
tatatatttt taatatgact gtgaccttga ctgataataa agatgtaata agaattgcaa   1440
gctaaatgtt tccctttgca actcatgctt tgtgttttgt tttgatgacc tactcgctcg   1500
taatgttttg taaggcactt cagagagaag acagatgcat catcctggcc tccatcaaat   1560
aacactawcc aaggtggcac ctcttctgca atgtttaacc ctgctagtaa tgaacgatga   1620
cttagttcgg atatwwcaga actttttgtt tataccatca ggtatgcatg aatttataat   1680
ctgaaagagg acttaaaata ataattaaaa sttaccagct taaaaaaaaa aaaaaaaaac   1740
tcga                                                              1744


<210> 1316
<211> 1744
<212> DNA
<213> Homo sapiens


<400> 1316
ggcacgaggt cagagaggct accagagtgt gattcattct gcctctgtcc tccccatccc     60
tgctccttga cctctcccag acaccttggt gttggtcttg tgccagggta ttcccagggc    120
tgaatgatgg cctgtgttgg tttttttgtt tgtttggttg gtttgtatgt ttgttttggc    180
acagtgtgaa ggggtcgcag actttcactt attatttgct gagttgtcca tgactgatgt    240
ccatttctac tgggtgatcc accccaacc ctttctaaaa ggctaactga tctttcttg    300
cttctgtacg ctctctttcc ctctcctccc tctcttttct taatttcagg gactccttcc    360
```

769

```
acagatctag tttcaggaaa tgtgaaaccc agttgtcaca gggcagctaa gaaaagccat    420
cttcattcgt ggagactgtg gccctgcaac cctggagaag gacttgctgg tacttaaaaa    480
atgggacatt tgccacccag gactgactgt acactccctg atcagccagc actctggaag    540
ctttgggatc ccaggaacca tggaattatt cccaaatgga ctctgaccag attttttgcca   600
tactggggggg tggcgggatg gaggatgggt actcaggcat gactgcgtat ttattaaagt    660
gtgtttttcc acaatgtacc aaacaaggca taagcagctt ctcctgctga ctggccaatc    720
actgcccatc tgagagatga tttcctctgg cccatatttg aatttattgg agtaactcaa    780
attgcctgag gaaaaatgga aaaattatcc accagtcgat tcaaactgaa tttcactctt    840
tataggaagg cagggcaaac ttgtaggagt acgaaacatt ttcaataaat ctacaaaggg    900
aagccttact acaattccaa aaatcatcat ggttggaaat ttgggaggag attatttgtg    960
aacttgttac ccttttggta atggtggact aattgctgta tagttatttt tgtttattta   1020
ttactgttac attaatttaa catgcattta tagaagaata cattcaaagc actgatgtag   1080
gagatacacg gtacttggag cagtcagcca aaaatcacag atactgcttt cacttaaatg   1140
gaaacaattc tccgataatg ctttgctttt tttcttatgt cactcttgtg tactatctat   1200
ttttctcctc tctgggacca agtttctttt tataaagcaa taatatctct gttttcattt   1260
cagaacattg tgctgtctgt cagcatatgt atatcagcta caaaatatat tcaactttga   1320
cttcttttga caaaggactt taggaaaaag aggaacaaag acattatttg agaattaaat   1380
tatatatttt taatatgact gtgaccttga ctgataataa agatgtaata agaattgcaa   1440
gctaaatgtt tccctttgca actcatgctt tgtgttttgt tttgatgacc tactcgctcg   1500
taatgttttg taaggcactt cagagagaag acagatgcat catcctggcc tccatcaaat   1560
aacactawcc aaggtggcac ctcttctgca atgtttaacc ctgctagtaa tgaacgatga   1620
cttagttcgg atatwwcaga actttttgtt tataccatca ggtatgcatg aatttataat   1680
ctgaaagagg acttaaaata ataattaaaa sttaccagct taaaaaaaaa aaaaaaaaac   1740
tcga                                                                 1744


<210> 1317
<211> 1982
<212> DNA
<213> Homo sapiens

<400> 1317
ggcacgagcc gaggagcgct tccgccctca gtggagcctg agagacactc tcgtaagtac     60
atgcaaacta aagaaagtga aattcttcct gaaatggcat ctcagttccc agaagcgata    120
ctgctcgcca gctgtgtctc agtgtggaaa acagctgctg tgctgaaatg gaatcgagaa    180
atgagataga attatttcct cagctatctt tggatgactt tggagagaag actcctctct    240
cctcgtctgc ggcgtggact tgatcatgga ctggtgcctt tgcattcaga aggagagctg    300
tcagcgtaga ccgaattcaa gaccaaggcg tgctacctga gctgacagct ttttgaaagc    360
cgagctgttt ctgaaccatg tacatacatg ttctgaaact ttctcatcat tttatgagta    420
ctgttcattg agagatgaca atgaagatta gatgaaattg gaaataaacc aacattgttt    480
acattccagg agacttgtag ctcagccaca cacgcagtaa tgacctgtgc ccgttcgcct    540
ctggcactgc ccacccctct ttttttttt cttctaattc tgtactcaca aaagagaatc    600
tcattttctt ctttcttcca ttcccttaaa ttctgagtac tgtacatata tttctgggtt    660
cccacgatga tgtgaaaaac taccagactg ttttttgtct tctcacaaag acaagaaaaa    720
tcagggcatt ttgtgagtgc cttaagatca aactaacaag atctgaccct ctcccctcac    780
agtgagccac tgccccactt cagagggtaa gagccaaaag cctcattgtg aaaggcactg    840
gacttggacc agggacacca tcagggcctt ggttttctca cgcataaaat ggagagtgga    900
ttaatcgcca aagattcttc tgatctgaca ttttgaaatt atgagagaaa ctagatgact    960
gtaaacttgg tcacaggcct ggttctggca gttctttgcg gactttttc tagcattatg   1020
ccaaataaac atgcagtctc agtgtgctct cgcatgtatg aatatctagt cctttctgtg   1080
gttctcagcc aagacataaa aactaggact cagagcacat acaaaaccag ttatgtttcg   1140
gaaagaggga aaagagtccc cgagcccgga tcttgtgctg cttttctcac tgacgtgttg   1200
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ctttgatacc tcagagctgg ctgtcaggtg gcagctcaca cccagactca ctggccacac   1740
ctcagcaggg ggggagtcga gtgtcagtct ctttctgtga aggcttttt tttcctttgg   1800
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770

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cctgggaatt tttcccattt ttatgaaggg gttttaaatt gtttcatttt gtgtgctgtg    1860
cttcaaagcc ttaactgtca aatcttgcat tatcttgttt gtacagaaat atactggcct    1920
agcagaggca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1980
aa    1982


<210> 1318
<211> 2689
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2316)
<223> n equals a,t,g, or c

<400> 1318
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tcattgcatt tattctattt gggtttcatt catcttcttg aatgtgtagg tttacatctt     180
ttgccaaagt tgggtagttt taaggccttc tttcttcaaa tatattttta gctctgctcc     240
ttttctgttt ctgggactct gatatgaatg ttggatcttt tgttattatc cctatggccc     300
atgggcttcc attctttttt tcccccaatt ggattgtatg tctggtctag aatggataat     360
ttctattgat gaatgttcaa gtttattatt tcctctgcca tctccattct gttattgagc     420
caatccagta attttaaaa atttacttgt tgaattttc atctccattt ttttctattt     480
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agtgtttgca attgcttggt gcattttaat gataggtctc ttaaactcat tgtcagtgaa     600
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tgaatatttt taattgtatc cttgatattt tgagtattag gttatgaggc ccaggtttct     780
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aattttata ctatacatct tgcacttctt ttgccagatg catcactatg tatttcatat    2460
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771

<210> 1319
<211> 1573
<212> DNA
<213> Homo sapiens

<400> 1319
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cagcctgtgc cccttcctag taccaccagc aaccatcaat cccgtctcct cctgcctcct   180
ctcctgcaat ccaccccgcc amgamtatcg ccatggcagc cytgatcgca gagaacttcc   240
gcttcctgtc acttttcttc aagagcaagg atgtgatgat tttcaacggc ctggtggcac   300
tgggcacggt gggcagccag gagctgttct ctgtggtggc cttccactgc cccckgytcgc   360
cggcccggaa ytacctgtam gggctggcgg ccatcggcgt gcccgccctg gtgctcttca   420
tcattggcat catcctcaac aaccacacct ggaacctcgt ggccgagtgc cagcaccgga   480
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gcggctgtgg cccctgtcac ctggtctgtc atctccctgc tgcgtggtga ggcttatgtc   600
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gttccagcgc acggccgagg tgcactctcg ggtgctcgct gccaacaatg tgcgccgctt   960
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ccagggcctc ccactctaca gccgcctgca caagtgggcc cagggtctgg caggcaacgg  1140
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cagaagggga tttttaaaaa actgttatct tcttggccag gggaaaggac cacaaggcaa  1320
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gtgaagctca ccagtgggct cctttatggt actctatgca gttaacatgt atctagctgc  1440
ataggggacac ccagcgcagc agtgcaccac tgggaagtgg cctccagtgc asctctggcc  1500
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aaaaaaaact cga                                                    1573
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<210> 1320
<211> 1986
<212> DNA
<213> Homo sapiens

<400> 1320
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agaatgtctg aaagtccatg acctggcttt aagagcggat tatgaaattg catccaaaga   180
acaagatttt ttctttgaac ttgatgccat ggatcatctg cagtcattca ttgcagattg   240
tgatcgtaga acagaagtgg ccaagaaaag attagcagaa actcaagaag agattagtgc   300
tgaagtagca gcaaaggcag aacgtgttca tgagttaaat gaagaaattg gtaaattgtt   360
agccaaggtg gaacaactag gagctgaagg gaatgtggag gaatcccaga aagtaatgga   420
tgaagtagag aaagcacggg caaagaaaag agaagcagag gaagtttatc ggaattctat   480
gccagcttcc agttttcagc agcagaaact tcgagtctgt gaagtctgct ctgcctattt   540
aggacttcat gataatgaca gacgactggc tgatcatttt gggggtaaac tgcacctggg   600
atttattgaa ataagagaga agcttgaaga attaaagaga gtcgtagctg agaagcagga   660
gaaagaaac caggaacggc tgaaacgaag agaagagaga gagagagaag aaagggagaa   720
gctgaggagg tcccgatcac acagcaagaa tccaaaaaga tccaggtcca gagagcatcg   780
cagacatcga tctcgctcca tgtcacgtga acgcaagagg agaactcgat ccaaatctcg   840
ggagaaacgc catcgccaca ggtcccgctc cagcagccgt agccgcagcc gtagccacca   900
gagaagtcgg cacagttcta gagataggag cagagaacga tccaagagga gatcctcaaa   960
agaaagattc agagaccaag acttagcatc atgtgacaga gacaggagtt caagagacag  1020
atcacctcgt gacagagatc ggaaagataa gaagcggtcc tatgagagtg ctaatggcag  1080
atcagaagac aggaggagct ctgaagagcg cgaagcaggg gagatctaac tagctgtgta  1140
catttcttca gtccttaagc ttcctacgga gttacgtact attgtttagt tcacagctgt  1200
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tggtgaacct gtaatacagt tctgaaagta cagttttata taataagatg ctgatctctt  1380
tattctttca agtaagagtg ctagtgaaca aattgtgtta cttgccttgg gattttttga  1440
acgtttgtaa aatgctgtct tcctagtcca aacagctgca gctttgggca ttttttctttt  1500
taattattct tcctctgact ttgtatccct taataaccac actctccaat tgtaagagaa  1560
aggggggcagg gaagcaatat agcttccatt ctaaggctgt attcgtgtta tgaattacta  1620
gctgattaca gttcagagca ttgatcctgg aatgtgtgct ggagaaattt aaaatactgg  1680
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gctatgttca ggatgttcta gggggtgggg gcagggactc ttttcgtaat aagcacttgt  1860
tttattttgt gtgtgtggag tataaaggct cacccttat tgtaaaaaaa taataataat  1920
aaaatgaaag aaacaatcac caccaccaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  1980
aaaaaa                                                             1986

<210> 1321
<211> 1993
<212> DNA
<213> Homo sapiens

<400> 1321
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gtttgtcctt cccccacctg ttgatccagg ttaaggaata cttttttaca ctttattcaa   180
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gttgttgaat tttctgtgct gtcctttata taatttttttg agggaaagtt agtgaatcag   300
gtcaacttac ttagagaatg tgttcattta ctttaaccca gaatacagtc ttgtttcttc   360
tatttgtatg tttcctaaac ctaattcaat aacatatgct ttctgttgtg taatatatct   420
ggtttaggta tttataatgt gtttaaaatt tgggcaaagg aaatgttttt cttttaaaaa   480
gtacttacat tgaaaattaa gatgtctgga ttactatgta aattctagag agtagcagac   540
ctctcatctg aagtcttagt gaatctcttt tgacatagat agcaatagaa gtatctttct   600
tctttcccct ttcttttttct aaacaagaga agaaaagcgt aatagagggg agaacacata   660
atgcccacta agggtagtgc attaaggaaa aacagtcttg gcaggtatat aggaatagtg   720
gtttccagac tggttgatga ccgtaatcac caagaacagt ggttctcagt cttggctgca   780
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tggcttgcac ctctggtctc agctacttgg gatgctaggc aggagattac ttgagcccca  1020
aagttgaggt tgcagtgaac catgatcaca ccactgcatt ctatcctggg tgacagatga  1080
gaccctctcc ctcctaaaaa aatccttaag aaatatattg atgcttggtt cctttggtca  1140
gaattttgat ttaaggtgtt gggagtgtag cacagatgtt ggaataaacc tctcaaactg  1200
attttaatat acaaacaagg tcgagaacca ccaaggaaga gtttttatgc ataaagattc  1260
ctgtactcta ccctagaact aatacatctg aatctctggg aatggagtat aacaatcaga  1320
tttgaaaagg tttctttagt aattttaagg actgaccagt ttagacactg ctttgttaga  1380
gtaaaatgat taggtaccta gtatcaacct agccatccaa ccttatatta ataactagga  1440
aaataaaggg ttggagcctc tgtgtttctt tgttgaaaaa tctgctacta ttattagatc  1500
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gaaaatgtaa ttatttttct gtaggcatag ttaaaaagat tttgtaaatg ttataaatca  1620
gtttctttat aagcggttta tttagataaa ttttgttata ctgacatgat tcactaattt  1680
tctaaatata aatggttcag ctcttagtta tttttaaact aatgacctgt gttatacttc  1740
ctatttttaa tgggctttta tgatgtttta ggttttttg aatcccgtgt ccttcaagtg  1800
ctttctaact ttgagaggaa gaaattgacc acctggacta tggaactgtg cgtaacagct  1860
ttgaaagtgt atttaaaaat taaatctata tgcctttaaa tcagtgaatt ggaaacatat  1920
tacatgtatt ttaatgattt tcctcaaata taataaattg tttcctttcc aataaaaaaa  1980
aaaaaaaaaa aaa                                                     1993

<210> 1322
<211> 1469
<212> DNA
<213> Homo sapiens
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773

<220>
<221> SITE
<222> (1419)
<223> n equals a,t,g, or c

<400> 1322
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acaggaaatc caaagtttgg tgtctctctc tctctctgtc tctttctttc tctttctccc   180
cccaaacccc tctcactccc tccctccctc tctccttccc ctatttgcaa tcatattctc   240
cctctgcttc ttttctcttc tgccctcctt gtgggcagtc atgaaaatca attcagactg   300
tgttcattag cagatttatt attctattga gaaagcactg gaatgttttg tgagattatt   360
tttatatgaa ggaatagcct gaactcaaac agatggtaag aatagtacaa acaccttagc   420
acatcactgc acacacagta ttctgaaagg agatttgaca cttaattccc attttcttaa   480
aataacagtt ttgttgactt aaaaatatga gatacatagg atgtgaaaaa aaatgtttgc   540
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aatctttgtt atataagaag gatgtttagg ctgtatatac tggggtagat tattgcctgc   840
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ttttatcttt tattttttt ttgtatgatg cactgagatg tgtactttct aacaggggat  1140
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taaagtatag cagaatctcc agaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  1380
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaamna aaaaaaaaaa aacaaaaaaa  1440
aaaaaaaaaa aaaaaaaaaa aaaaaaaaa                                    1469
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<210> 1323
<211> 1254
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (441)
<223> n equals a,t,g, or c

<400> 1323
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acatgtgcaa cccctgggtc tccctgttgg gggctgttgg gtcccttctc atcatgtttg   180
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ggacccaagc ycaggacctt cgtggagctg cttctccaac ctgagaaact caagacccat   600
cckcccgytg tcactttgga caatggamat ctacattttc ttttcccttt tttttttttt   660
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caaagtactg ggattacagg cgtgagccac catgcctggc cagaaatcta tgttttctta   960
gaacatgtgg aagaaggaaa aagacaaaaa aggaagtctg gattctgagg accacgtctc  1020
acccagggtg acatcaggaa tggtgctagc ctctgcaaca cgacacccag tctgaagagc  1080
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tctatacagg tactaagact agcaggggac accaagactc tgcacaacca gattgcttgt   1140
gcagagggcc acaataagtg tatgtttat  attttattgt attatttatt caaaaataaa   1200
taatacactc acatgtttcc acacccaaaa aaaaaaaaaa aaaaaaaac tcga           1254
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<210> 1324
<211> 1827
<212> DNA
<213> Homo sapiens

<400> 1324
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gtttaaattt agtagtagca atagacctgc aatgtaaagt ctaataatta ttgtagaaaa    180
ataattctct gaggtttttc tttctccaga tataatttt  ttatcatctt atatcctgtt    240
ggagttgctg gtgaacttct tacaatatac gctgccttgc cgtatgtgca agaaaacagg    300
aatgttttca ataagacttc ctaacaaata caatgtctct tttgactact attattttct    360
cttataacca tggcatcata tatacctttg tttccacaac tctaattttc aataagttac    420
gtcaaaggaa gaaaggtgct tccatggaga gtggattgta gaaaggatg attaaatgat     480
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acaagaataa acaactttgt gaaatatcat ggattgtatg gtttcttaaa atataacttg    600
agacacgtgg tatttgccag tatttgtgtt cctcttgtgc cagatctatt ttttacaaga    660
actgtgcaaa tatcagtaac ttttgggtag gtattgatta ttaggaaaat aattaggtgt    720
attatctggg ggaaaaaaaa acttttgcta agttttttt  gaaacatgct caaagctttt    780
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gtttggaagc gtggatataa tttgctaaag taagactttt gatgtagata aagtagcagc   1020
ataaaaacac acaaatattc aagtagatgt cacagttgga aaatattctt tggaaatatt   1080
tctaggcagc tgaaattact tatactgcta aggaaatctg cttttttatt aaattagcca   1140
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gccccactat taaaaaaaa  aacatgacat ctgactataa tgttgtattc aggctgggag   1260
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cccagaagtt caaggccagt ctgggcaaca tagcaagacc ccatccctaa aaaaattaca   1380
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tacttaggta actaaacatt ttggggtatg atctttggac agactccttt cattctgaat   1740
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<210> 1325
<211> 1514
<212> DNA
<213> Homo sapiens

<400> 1325
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aatgtctgac ccgaaagaga atgtatttac actcatgctg cgttgttcag cagcccctct    180
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cggttccagg gggaaacaag gctttggtat tccgctggct ccagcgcttt ttctgaaacc    540
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aaagcctttt gtctccttgt gcctcttttt atccttagga aaagatccag gtgcttgtga    720
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<210> 1326
<211> 1535
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (574)
<223> n equals a,t,g, or c

<400> 1326
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tgatgcttgg ggttttttgcc cctacgcttt tcactttgtc ttcctgtaat ttattacaac    180
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<210> 1327
<211> 3051
<212> DNA
<213> Homo sapiens

<400> 1327
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776

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agtttgaagt gtatgtagat tgttgccccg tctttcccag gtcacatgtg tgagatgcct      360
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<210> 1328
<211> 1290
<212> DNA
<213> Homo sapiens

<400> 1328
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ctcccctatt gctattatct attactcttg agagctggct gtcctttgaa agaaagaagt      180
aatgttcttt gaaagaaaga aaaatctctt gctgtgtcaa acctcaaaat gttgctattg      240
gggttagaag gcctcctctt tatgcttttt aatgctcttt caaacgtgtt cttttagacc      300
agttttctaa taagctttgt aaaatgtact atccaaatta gaagcggatt tggaaatgca      360
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777

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aactaacgtg cacttagata tccaagtggg tgagcttagc cactcttacc catgctcttt      420
ccctggaatc cctggagacc tgtccaagat gatttccata taccagcata gaaaatcaga      480
atcaagagca aactctgaga ctggcacaat ccaagaagat ttcctggctc tggcttttag      540
taatttggga ctccaactgc cactgtactg gactgtaatt tataaatcca gtagctacgc      600
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gcaattgtga agtgaaggca tctgctttct ttacagtatc agagtccaag aacaggatgt      720
caccatagat aaaagcctca tacaaaggca gaactacact ccaaatttaa tgtgtttaaa      780
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tgcttgagcc caggagttca agaccagcct gggcaacaca gcgagacccc atctcttaaa     1140
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<210> 1329
<211> 1503
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1061)
<223> n equals a,t,g, or c

<400> 1329
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gaaatggcac agaaagaaag cctagagaag taaacaaagc aaacaaaata aaaattacaa      180
tcaatgaaaa ggatcttagg ttttaattct ccaagttgtg tactggagag tagccgcact      240
gaggggatag aatgttctcc taatttgatt atataatcac tcttgtccat tactactact      300
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ggcaccaact gcccataaat ttttagtcaa ttacacagaa acctttgact cttgggggct      420
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tgattcttat aatattataa tcattaattc cctttktttt aggstcaaca tctctaccca      540
cattatcatg tttcttgatc acaactaggt tacaaggggtt ggagatacac aaagatgaat      600
gccatactat ttatgcttat aaaaaagcaa tttatctttt gttctactac agaaaatcct      660
tcctcaaaaa caaattcatg aagtcagcct tgctcaaaca ccttcagtgg ctctttattt      720
ctggacataa atctaaattc ctttgtcaac attttgagat cttcaataac ctggtttcag      780
tcttccaatt taatcttaaa tatgttctac tgaatgaacc aagtgcttaa acaatttta      840
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acctgaagga aatggctctg ctgatgcaag cagcacattt tctggcttta aatcacagtg      960
cacaatattc ttaaaatgca gattccycaa gcaacaagta tctgttatga aaaagatttty     1020
cttttcatgt ctggaaatca cagtaaacct cctgtgactc ntgaatgatt taatttgaaa     1080
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aatacaaaaa ttagccaggc gtggtggcac acatctgcaa tcctagatac ttgggaggct     1380
gaggcatgag aatcacttga atccaggagg cagaggttgc agtgagccag attgcaccac     1440
tgcactccag cccaggtgac agagtaagac tcttgtctta aaaaaaaaa aaaaaaact     1500
cga                                                                  1503
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<210> 1330
<211> 2289
<212> DNA
<213> Homo sapiens

<400> 1330

778

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gaataggagc attgatcttg ctcttcttcc tgactgtagt acttcctttc tatggcttta     180
accagccacc tcctcctggg aaacatctcc tgtgggcttg ttgggtatag aagctactct     240
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aaaaaaaaa                                                            2289

<210> 1331
<211> 2929
<212> DNA
<213> Homo sapiens

<400> 1331
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<210> 1332
<211> 1203
<212> DNA
<213> Homo sapiens

<400> 1332
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780

<210> 1333
<211> 3186
<212> DNA
<213> Homo sapiens

<400> 1333
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aaaaaa

<210> 1334
<211> 1608
<212> DNA
<213> Homo sapiens

<400> 1334
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ggtgcatgct tggtgtgtat ttgtacatgt ctgtattgct gtgtccctgt aaatacatgc     180
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<210> 1335
<211> 1218
<212> DNA
<213> Homo sapiens

<400> 1335
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agcctccttc ctcactcttt tttagaaaca gtttagtttt attattatgc agaatttgtt     180
gagcaaattg caacagccca agccacagct agctccacaa gagcccttcc atgagccctc     240
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ggcacctacg cggtgaccta cgtgcccctg acggccggca tgtacacgtt gaccatgaag    1080
tatggtggcg aactcgtgcc acacttcccc gcccgggtca aggtggagcc cgccgtggac    1140
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accagcagga tcaaagtctt tggaccagga atagaaggga aaggtgggtt tcatttaaaa   1200
aaaaaaaaaa aaaaaaaa                                                  1218
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<210> 1336
<211> 368
<212> DNA
<213> Homo sapiens

<400> 1336
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actctcaaga tatatatgtt tgttttgaat gttggcagat gccaatagcc cttaacattt    180
gaaaaatggt acttgaacat caattatgtc tcagagttcc cttaaacttt ttgggcttaa    240
atattttat tcattttggt catacctttg acaatggata tgttaaactt taacaattat     300
agtgacaaaa cagcttgctt agaacctgga aattaaaaca caatttctag agtaaaaaaa    360
aaaaaaa                                                              368
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<210> 1337
<211> 685
<212> DNA
<213> Homo sapiens

<400> 1337
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<210> 1338
<211> 781
<212> DNA
<213> Homo sapiens

<400> 1338
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c                                                                   781
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<210> 1339
<211> 829
<212> DNA
<213> Homo sapiens

<400> 1339
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atgttactgt taacgaatta atttatttaa tttcttcctt catgttccta atcattttca         180
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<210> 1340
<211> 1007
<212> DNA
<213> Homo sapiens

<400> 1340
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aagctagggg gcaggggcca aaaaaaaaa aaaaaaaaa aaaaaaa                       1007
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<210> 1341
<211> 854
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (345)
<223> n equals a,t,g, or c

<400> 1341
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gctggggttc tgccagcctc ctggccagca ggggtgggtg ggcagactgg ggccagtatc         120
agctgttctg cctggaccca ggccgggctg ggaaggcaca cttgtgctta tttcccgcct         180
ccacttctgt gcaagcttgt gctgtcataa gcagagatca cagccccatt tcttggatgg         240
agaaagtgga cactgaggtc tgaggctttt gaggacagtc aggagccctc ctatgggctc         300
cagtgatgca ctcaccagct tctggtcctc ttcttccacc tcttnagagt gccttggctc         360
cctcctgtcg tcctggggaa cctcggcccc agccctgcct ccccagccag tcacagctcc         420
tccctggtca ccctgaggga gctcagggcc cggctggtag ctgggttgct ctgcttctgt         480
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<center>784</center>

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ccctgcctgg cctcccctct catggcccag ccaccccaga acctgaagag gttttctagc    600
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gccaggccta gtgtgccagc cagcgctcag ccttcagtaa agggttcccc tgcttccaac    720
ctccattgca ctgcttcccc taagactgtg acctcctgga aggctggagc acaactgcct    780
ctcaataaac gtgttgcaaa aaaggaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    840
aaaaaagggc ggcc                                                      854


<210> 1342
<211> 1274
<212> DNA
<213> Homo sapiens


<400> 1342
cccacgcgtc cgtgcatatt gaatttaact aatcattgtc cttaatagga agagcagcga     60
agaggcacaa aaagagagga gaaggatatc aaatttattg aacataatgg aaccaagcct    120
ccttcagttt tatatttctc gacagtggct taataaattt aagacctttg ccgaacctgg    180
ccctatttca aataatgact ttctttgtat tcatggaggt aagaactcct gtaatgcaaa    240
ccggtagtag aagtttgctg taaaataatt tgcaaattag gagagccaag aattttcctc    300
tcccacttat ttcccatttc cccacctgca ttcaaactta atgtgtttta attccatatg    360
gtttcagaaa ttcacccttc ctttttaatt gtaggtaatc tctagcttct ttattgaaca    420
tatatttact gagtacatgc tttctaaact ttttgctagt gcctaaggac actaaaaatc    480
ctttttcttc tgtgaaagct ctaatttcat agtagagtaa gatacataaa cagctgttta    540
cattacagtg agctcctcta ttatacatca ttttttcctac ctgaggcatt cctgtgctgg    600
tgattttatc tatcgactat attggtggtt cttaacccca ttgtctaaat gaatagctgg    660
ctttttttccc aagtatggaa atgtatctgg gatttaagaa aaaaaagcct cataattaaa    720
tataactttg gcccttgtga gattggctgt gttaatgttt atttctacaa taaataggac    780
ctttgtgtga tgccaattaa acttcaaggt tgaagatggg atattcatgg taattatgtt    840
tgtagtgaaa ccagaaggga tagggatacc tgtattggac atagaaattt taaggtgtat    900
gttcatcttg aggaaacaca atcaccaaaa atgctttata attaccgttc ttgggagaga    960
gagtgtaaga ataatgattg agctgagtgc agtggctcac acctgtaatc tcattgtctc   1020
aggaggctga ggcaggagga ctccttgagc cctagagttt gaggttgcag tgagccatgg   1080
tcatgctgct gcactccagc ctgggtgaca gagtgagacc ttgactcaaa aaaatggcca   1140
gacacaatgg ctcatgcctc taagctcagc actttgggag gccaaagcag gaggatcact   1200
tgaggtcatg agtttgagac cagcctgggc aacataatga gagcctgttt ctacaaaaaa   1260
aaaaaaaaaa aaaa                                                     1274


<210> 1343
<211> 1820
<212> DNA
<213> Homo sapiens


<400> 1343
acgcgtccga ttaaatggtt attctagctc ctcttaacaa tgaaagtgat cactctctgg     60
aaccattgga aataggtcat tatatcatat gaaatgtatt cttgaattct aatgactatt    120
attttaaaag tgctcttcat tcagatgaca actcagttaa aatatttttc aacaatgatg    180
aattattttg cattaattat tttttctgtt tggttattgg tttaacactc tggagatgag    240
caaagaaaaa atatttaagt ctgcctttcg gaaaaaccat tgtactctca gtgtcttcca    300
tcatttctta cctacaaatg ttgtttttgtt taaggaaggg ttcttgacat ttgccgtgta    360
aggttataga ataaataaag agtttatta cctacggtag tggtgattta gtttattttt    420
aattcttact gtctattata ggtgtaactc attgattta gttacaagtt tttaatttaa    480
agtttctatc cccaaaacta ttgccctcga aagtatcaaa ttactataaa atatgaaacc    540
ttaaatactt tgacacttat gtaaactagg gtaacatcat tttcattacg tatgggaaag    600
tacatatcta aatatatttt tgaccaaata tatttgtcaa attttttaggc cagtttattt    660
tgtcccaata tttgagcaaa gttgagtgga tattaagagt gggtttcctc aaattatgag    720
gaacaaaggc ataatgcctg gcacaaagga gaccctgagt gaatcacatt gcttttttaaa    780
aatttgtttt gatcacttaa gaaaaaataa gtcatgtttt tggtatatgt ctcaatgtaa    840
gaaataaaac tttatcaaat atttgaattt actcacagct aattaggttt ttaaaaagcg    900
ttaaaatttg tgacatgtat ttctatcaaa ttgtatacac actcattttt taatttaagg    960
aatcaaggat ttatagatac agttttgtta tgcatattga acctatgaac aatagctaca   1020
tttctaagta tcttttgtga agttagttgt tttaatgata ctaaagatat ggcacttggg   1080
cttgtcttta agaatccctc cagttatgca tattttttatt tataaataga cattttttctc   1140
```

```
tggcaacagc ttttattatt ctctcagagg ttcacagcct tccaaaattt aagaaccact    1200
gttttttttt ttgttttttg ttttttgttt ttgagacgga gttttgctct tgttgcccag    1260
gctggagtgc agtgagctga gattgcccca ctgcatcact ccagcctggg tgacagagcg    1320
agactccatc tcaaaaaaaa aaaaaaaaga aaaatcaga cctttataac aaataatgaa    1380
acatttccca ataatgaaaa gcccagaacc aagctaagct ggtgaattct atcaaatatt    1440
aaaagaagaa tgaacacaag tcattctcac atgcttccaa taaatagaac actcagattc    1500
attttttgaa gccagtatta cactgatacc aaagccaagg gaaagtatca caagaaaact    1560
acagatccaa atcctttatg actagataca aaaatcctca acaaaatagt gacaaactga    1620
attcagcagg ttattacaag gatttataca tcaagaccaa gtgggattta tcccaggaat    1680
gcaagattgc ttcaacatat gaaaatcaat atgatatacc atattagaag aatgaggaga    1740
cccacataat cagctcagta gatacaaaaa aaagttgcat ggaacccaaa atgctttgat    1800
gatttaaaaa aaaaaaaaaa                                                 1820
```

<210> 1344
<211> 1984
<212> DNA
<213> Homo sapiens

<400> 1344
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tccgtctttt tctacatttt agctcctaac aatgcagttt ctatttattt gctgatttct      60
tactattgat ttgatagtct ataattaaca tgtatctttt taataatttt ttttcagtt     120
cttggtactt aattctagtc cttctaaatc agtattcagg aactattgtg ggagtgtatt     180
agaaagtgca tgttcaaatg ctaatcacat atccagggag actccagttc tgtgttcatg     240
cctctcagcc atcaaatgac ttcgggaaat attaattccc ttctccaggt tcaaagtcac     300
ttcaggtaaa tgaaagaaga aatgtggttt ttgatatcct ggtgcagagt ctgaagcttg     360
atttctgtgg agggtctaga gatttgctaa ctgaaggcat tatgggatag ttagtgccca     420
cttctatgta ggaaatattt ttctgtctcc cattgataat agtaaataca aaggaacatc     480
attagtttaa tattatgaaa cagcctgcag tttcaaagga atcatgtttt tgatttggtg     540
agacagggct ggattctcta cagcctatat tcatcattct gcatatcatg gttgttgatt     600
attgaggatt aggcctccta atcctacagc tgtgtcctag gtgcttggga catatcattg     660
aacataacaa aatccctgcc tcatggagct tgcatcctaa cagagggaaa tagtaaataa     720
taaatataat aaataacaaa aataaacaga gtctttgaaa gcagtaattc tttggaaaaa     780
agaaacgaat attgcaatat tgcaatttaa ggggattgat agtgtattat aagttattat     840
aagttgcaga attaaatatc agagcagtta ttattgaaaa aaaatcgagc taatatttaa     900
gggagataaa ggagtgaacc atgttagttt cggggcaagg acattccaaa ctgaggaaat     960
agcaagtgta aaggtcctag ggtaagagct gccaaacatg ttctgcaggt caagcaggca    1020
taaagaggga tgtaagttaa tgtaatcatt ttatcctttc taatcttcaa ttgatgttag    1080
agtcttttta gtgttcctaa atgtctgtac actagatcct ggttggctga attgccatct    1140
gcagtggtcc tgctactgga ttcctctgac ctttggtcat tcttcccttt aaacctttta    1200
cattttgaca cttcattatt ttatgctgct tattcaaaat gtatactttc ttttaacgtt    1260
attctttctt tagtctcttt acttcacttg gagtcagatt ctactagaat cttttttgac    1320
cccaaaagca tttggaaaca catgaaatat ttgggggaaa gggagttgtc atggtaacta    1380
gggaactccc gtttcctaga ctgcagtaca gtgtcatgat ctcggctcat tgcaatctct    1440
gcctcccggg tttgagcaat tctcatgtct cagtctcttg agtagctagg attacaaatg    1500
tatgccacca tgcctggtta ttttattatt attattatta ttatttttgt atttttagta    1560
gagatggggt tttgccatgt tggccaggct ggtctgaaac tcctggcctc atgtgatctg    1620
cccgccttag cctccttaca tgcgtgagcc actgagcctg gccaaaatat tgtctaatta    1680
ttcatcattc tgtagtgttg agtaaatgta acttttttgt gtctatatta tgtagttttg    1740
agtaaatgta actttttttg tctgtgtctt tggacacttg tagccaaaaa gaggaagaag    1800
aacaggaggc atacagggta ttttaaggtc tagattgaac ctggaccttg gaactgcttc    1860
ctaggtgttg caaatgggta agaaacatat gtaacaaacc tgcacgttgt gcacatgtac    1920
cctaaaactt aaagtataat agtaaaaata ataaaaaaaa gatcaaaaaa aaaaaaaaaa    1980
aaaa                                                                 1984
```

<210> 1345
<211> 789
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
```

```
<222> (15)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (47)
<223> n equals a,t,g, or c

<400> 1345
cgtatgttgt gtggnattgt gagcggataa caatttcaca caggaancag ttatgaccat      60
gattacgcca agtctaatac gactcactat agggaaagct ggtacgcctg caggtaccgg     120
tccggaattc ccgggtcgac ccacgcgtcc gctcttatat taaaataata cctggccggg     180
agcagtggct cacacctgta atcctagcac ctttggaggc cagggtgggc agatcgcttg     240
aggtcaggag tttgagagca gcctggccaa catggcgaaa ccccgtctcc gcaaataata     300
caaaaaatga gccgagcgtg gtggcacacg cctgtattct cagcctcctg agtgcctggg     360
accacagtca tgccccacca cacctggcta atattttttg tttttgtaga gatgaggttt     420
cgctatgctg cgcgggctgc gtcgaactcc tggcctcaag caaacctcct acctcagcgt     480
cccgaaggct gggattatgg gtgcacgcca ctgcatctgg ccctttttgta ggtatttttt     540
cccccttttct ctgattgtac ctattgattt ttctcccttt ctctgattgt acctattgat     600
tgtttagagt ctctgaaaaa tcacactctt attggctaag tcttcacccc ataaatcttt     660
cctaataaat gctcattcag actctcagaa ctttcagcat taaagagttt tctattcatg     720
ccctcaattc ctcccataag aactaaagtg atcttttgca aagtaaaaaa aaaaaaaaag     780
ggcggccgc                                                             789

<210> 1346
<211> 354
<212> DNA
<213> Homo sapiens

<400> 1346
ccacgcgtcc gaattttttc attttgccta attttagact tattgacaaa gtgctgggaa      60
gacaggcgtt agcaccgtgc ccggcctctg tttcctgtta ttagtgattt tcctgcccaa     120
gattgcaaca acaaatatgt agaactacag actgtttaga atgctgagac tgttctaaga     180
aactttcaaa aacagtagca cttcaaggaa tggtcacttt ctatgaaaga aactggtttg     240
atagccataa tcttattgct agctgctttt agcaaaagtc ttttcttgaa accaccacct     300
atactcttta aacaaataaa aactaaaatc tcttgctaaa aaaaaaaaaa aaaa          354

<210> 1347
<211> 1487
<212> DNA
<213> Homo sapiens

<400> 1347
acccacgcgt ccgaaaaaaa aaaacctcat ggtgagatag gtgaaaaata gtctaaaata      60
ataggaagcc ctttgctggt gctaaatttc catttgacag atggtgggcc tgaggcctag     120
aggcatcggg gttgcccaag gtcacacaaa gcctgacatt gagcatttgt tttttaattt     180
caaatctatt ttctcttaca ccccatctgc cttcatttct cttgctatga aaagacactg     240
atggtttggc atacagtctg ggcgtagtca acattttgtg ggagaaaagg aaggaattag     300
actaggagat ctgggatgca agtatatatt cggcccttga ttagcctttt gctttggggt     360
taaaagggag tggctggggg tgggtgaggt tttaactaga tttccaagaa cctctttcct     420
ccttgctttt gaagttgggg gtgggggtac tatattggtt tgtcagtcag ctactcatgc     480
caaacattag gtcattatca ctttcactaa attcactcat tcaacacttt ttggtctgca     540
aaattttgaa acgggaaaga gttaatgaat acccaggcaa ttttaacaca atgatgaaaa     600
aggctacaaa ggagtaaatc tccgtgttat gaaagtgtgc agaggagagg tcgaggaagg     660
gctctaggag ggaattatat ctcagctcag attggacccc aaaggaggag ttagttgggt     720
agaatggaag agagtaagga agggaggctc tctgggcaga gccactcctg ccctccagag     780
agatagcata gcccttgaag gaggaacttg aagacatctt gtttggctga agcctcaggt     840
aagtggggga tgtgacaaga ggtgaagttg ggtcattaga gggcagaaga gcttctaacc     900
ttattcaaga gtctggactt takcctagag cagtagggag ccactgtagg atcatrtatg     960
gggaggccaw ttaggacgtt aagaaacaac atcatttgcc cattcccttc acttggacct    1020
ttgccgttta caaagtactt tcacttatgt tattacttta tgtaaactac tcaataatca    1080
```

```
tataaggtag aaggagatag atatctcctt gttgtagaca aggaatctaa agttctgaga   1140
gggtagttga ctgattaatc aagtaagaag ctagagggggc caacacgtga gcctcgcact   1200
tcagttctgg actgtactct agctgcaaca acctcttcct ctcaaaacag gtgctggagt   1260
tttccacagg actctgtgtg ttgggcactt acccatagga ccagcccctt tcagtggtct   1320
acaataacta ttggccgggc gcggtggctc acacctgtaa tcccagcact ttgggaggcc   1380
gaggcgggcg gatccacgag gtcaggagat cgagaccatc ctggctaaca cggtgaaacc   1440
ccgtctctac taaaaaaaaa aaaaaaaaa aaaaaaggg cggccgc                   1487
```

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<210> 1348
<211> 820
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (779)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (798)
<223> n equals a,t,g, or c

<400> 1348
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attttggagt gatgaataaa tagcatgctg ttcttctata gctagcaaac aagactcagc   120
tttggagaca agaagaagga atacaggaga tgtttccttg aatgagtctt cttcctaaac   180
tctgctagaa gtatgtcaga aagcgaaggt tacctcagtc tccaagtcat gaaaacatga   240
ggtctttctg ttttctaggg aaagtatttc atttcctagt gtggcttttt gcacacccca   300
gaaggaggaa gacaagcctt cgtgtcacct ttacatggta gttgagatgc ttcacatttg   360
tacataacat cttatatgat cgaaagagga actcaaactc gacaggggag aataaggaaa   420
tacatctaaa actgacaatt atgttaatcc ctcaattccc tgggcccca aaatagtctc    480
ctctatttgc catttcaaaa tagctaatga gagggtaatt ggacatgtag acactgaatt   540
tccactgctc atggtttcct tccctgggct cccagtcacc cggaaggccc cggattacct   600
caaatgtcat aatgggktca tcgcattacg aattacctcc ttctgccaat aaactacaag   660
ttctttgagg accaaaaaaa agwmraaaaa aaaaaaaagg gcgggccgcc ctaggaggat   720
ccaagcttaa ggtacccggt gccattggga cggccaatag ctccttccaa aaggggggcnc   780
cctaaaattc aaattcanct gggccgttcg gttttacaaa                         820
```

```
<210> 1349
<211> 751
<212> DNA
<213> Homo sapiens

<400> 1349
gcacaacttc aacagatttt ctgtcatatt ctcaccagca catctgaatg aggctttgtg    60
ttttccttgc tctcttgcat gttccttttc aactcatggc ccacagtgac tctcagagat   120
ttatgccaaa attgcataca attgttttct gaatcataac ttgtctattt ttctgcctat   180
gtgtgctact ttcagtttgt ttctcatcaa cattttgact ctcagaagag cctccatttg   240
cccctttctc tctttaggta tctaagatct ttgaacacct ggacctttac atttgatcca   300
accctatcaa ataatgaact tctcagagag gcatctgggg tcctggaact tcatgttgat   360
gaagtcatat tatataatat gataaaaata ttctcatgca gtattttaaa taatttcaaa   420
ttctagaaga agcaaatttc agcgacatgt cattgagttt ttatttggta aagctataat   480
tgtgcagtgt acaaagcact ttttaaaaag atagtttatt ctgtcagggt atatgaagtt   540
agtatacagc cagaacagcc aagcctcaat tcttgtacct tgtgtctttt tattactgtt   600
taatcaatag atatcatatg tttatgacag tttcaagaat tgtttttaaa cccaaactta   660
attttawgtt tcagactatt gttagaaaaa caaaacaaga aaaaaaaaaa agggcggccg   720
ctctagaggt ccaagcttac gtacgcgtgc a                                  751
```

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<210> 1350
<211> 1084
```

<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (864)
<223> n equals a,t,g, or c

<400> 1350
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ccacgcgtcc ggatgtatca aattacaagg tttcatttgt aaataaggtg attaaaatga      60
caaagtgtat taaaagaaat tgtattgtcc agtgaagttt taagaaacag aaaccataag     120
gtgattatta ttttttcaagc cccaaaggag aattcattag atgacatact tttaaagttc     180
attacaggtg tgagccactg cacctggccg tataattttc tttttatcag ggatgtaggc     240
tcaaatgaga ttgggtgcca aaacttcatt attttttcttt tcttttcttt tcttgctagt     300
ttttgctaaa cttcttttgt taaagaaagg cagttactgt tactgagata gctcgatggt     360
atcctgtgca tttttttttg aaagctcaaa tagaagtctc acagttttag ggagggattt     420
tttttagtct acaaaaagtt attagtatgc ctgtcctctt agtactgtac tgcctagtta     480
ctctcctttc aaaaaaaaaa gcgtatattt attatatttc catggtaaac tagcagctac     540
aataatgtac gctttttttt ttagtctaca aaaagttatt agtatgcctg tcctcttagt     600
actgttccta aaaatgcttg tacattctaa aactgcaatt ttactgatag ttgggaaatg     660
aaagtgcaaa agaaattaat gacttgtgaa gttctggtat ttcattatgt caagacaaga     720
tttttttttt ttttcctgag ctgtagatct catttgctgt tggttgatta agaaaaaaat     780
cttggccagg tgcgataggc taagtctgtg gtcccagcac tttgggaggc tgaggtgagt     840
ggattgcttg agctcaggag ttcnagacca gtctgggcaa cgaggcgaaa ccccatctac     900
aaaaaaaaaa aaaaaaatag aaaaattagc caggcctgta cacccatagt ccctcctact     960
caggaggctg aggtgggcgg attgcttgag cctagaaggt tgaggctgca gtgagccgag    1020
atctcaccac tgcagtctac cctgggtgac agaatgagac cctgtttcaa aaaaaaaaaa    1080
aaaa                                                                  1084
```

<210> 1351
<211> 1403
<212> DNA
<213> Homo sapiens

<400> 1351
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ccacgcgtcc gcccacgcgt ccgcccacgc gtccgatgac ccatggtggt catgaccaac      60
tgcttttaaa aataccgaac caaaactgtt ttaaccttgc cccttgaatt atagcagttt     120
atgagtcagc agcttatgct ataagggatt tgattattat ttacttcgag aaaactggct     180
tccttgaaat ctcctgatat gcatgtaaaa ctgtcatgtc atgtaaatca aaggtaatat     240
tcaaggtgtc caactaagtg taaggtccaa aataatgacc aaatgatata aagcaactta     300
gccttggaaa caatatgaag catagtacta atgtagaata gttgtattgg agttgacttt     360
atataaaaat gtcttacatc actctactta aattcatctt gtatttcttc tctctagtat     420
ctgagttcag aaaacttatt ccatttataa tgttctcttt atattggtta tgctattttg     480
atcttaccat tctttttaaa agtcttatta catatttatt tttcctttttt tctttctatt     540
ctatcattat acccataaga gagtttgtta cacctgaaaa gtgaaacaaa ctaaattaaa     600
ataaaataaa agaataaata aagaacattg gtcaagtcta caaaagttaa aaatttaaaa     660
atcacatggc tttgcttata ttgaaataaa tgttttgtgt atggttaata caaacttctc     720
tatttcctgg catttattca atgagtaatg aatagcgtaa tgttactttt tacataaatg     780
ccatttctgt aaactcactg tctaaatatt tactactcta ggtaattgcc agatcttta     840
tatattaaag gtcatcaaga atgaattaat catttagcat tagtaataca actggaaggc     900
tcaagaagtt caagtatgtt aaaaatgctt tggaaagtct tctgaaaact attggactag     960
tcctatcata aatgggatat ttagatactg taccattgc atgtgtgctt gtgtgtgtgt    1020
gaatgtgtgt attggtgtat acgtgtgtgt ttgtgtcttt ctgcaggcac atctcatttt    1080
aactgttaga gttgaatcag tcaaataatc acttttgtga taggctcact tttgtgaatg    1140
atctgagtat cagaatagaa acctatagat atggccaaat ggtaatattc atttatgatg    1200
atttttttaa aaacacatta attttattgt gacagaatgt tggttattaa tgtttgaaag    1260
atctagttgc atacacagac tcttggatca aaaataaaga gctctgggct cacttcttag    1320
atcagtctgt ggccaaaata aatgaattta attcctggca catcagtttg tcaaaattag    1380
gcgggaaaaa aaaaaaaaaa aaa                                             1403
```

<210> 1352

<211> 1566
<212> DNA
<213> Homo sapiens

<400> 1352
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cccacgcgtc cgtgctatgt tgccccgctg gtctcaaact caatggactc aagcaatcct      60
cccacctcag catcccaaag tgttgggatt gcaggcatga gccactatgc ctggcctagt     120
aaaatatttt tatactaagt agagagagta gattcgtgga aaactcttaa actcaccagg     180
tactgcaatg aaacttctag cattggtgat tagcatacta atatgtactg ggcaaattta     240
taattgttag taatttgcaa tggagtcttt tcattctgat attcaaagta ttttacaaac     300
actaaacttt caaaatctct cttataatag gtattgttaa attaattcca tatttcatat     360
gaaaaaacaa aagctgaggg aggcaaagtt acttacctaa gaccacacag tatttaactg     420
atggaacctg agtagttcca aatttccgtt actcaactct aacccgcata taaaataaaa     480
tcagtgtaat gctaagaaat actattgtac ctccaagaat aaacttgaca ataaaaatat     540
tgtcatggca gtttaaagaa atgtctttat taaaatgagg attccaaggt aaaatcctct     600
aagtataaac atatttatat aagatattta tatttaagaa gatagtaatt tcattcaata     660
ttttgttttt aatatcatga tcattaagtt acatagattc tcttctggta agcaaagtgc     720
aaaaaaagcc aaaattgtta tagactgtga ttcaaatact ctttcatata gccagggtga     780
taaactactt atttattgaa cttgactgtt taaatataaa aatgattgtc ctaatggaga     840
aagcccctaa aaagcaagta gctccttttg cataaaagac ttttacatta ttttggattt     900
tagtgaacag tgtttttttc tattgtaatt tctgattaga tatcacatta tttatgaatt     960
gtttgttatg gtaggagtat agtatctttt ggaagaattt atcttagtat atattaacca    1020
atgagtcaat taagattagc caatttcaat attatcctta agcagtatta ccattgtaat    1080
gctagaatag acatatccca gaccattaaa aacctgacaa ttctttatcc aaaaaaaaca    1140
agcaggcaaa atatttacaa aactattaaa agattggga gctaaagtag tggcaaatgc    1200
attactctga aaatcctcac acatcctctg aaaaccaata aagatgaaca aataagacta    1260
cacataacca ggctgggcac agtgactcac acctgtaatc ccagcacttt gggaggctga    1320
ggcaagtgaa tcacctgaag tcaggagttc aagaccagca tgaccaatat ggtgaaatcc    1380
tgtccctaca aaaatacaac aattagctga gtgtggtggc acgtgcctgt agtcgcagct    1440
acttgggagg ctgaggcaga agaatcactt gaacccagga ggcagaagtt gcagtgagcc    1500
aagatcatgc cactgcactc cagcctgggc aacagagtga aactccatct caaaaaaaaa    1560
aaaaaa                                                               1566
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<210> 1353
<211> 668
<212> DNA
<213> Homo sapiens

<400> 1353
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ggtaaactat cttgagatta aatggaggct gcaaaatcac tgtgtcccag ggctcctttg      60
tcttgctctg ctcttcttct atgcagtttc tgtattgtgg gcgaggatgg ttaccattgt     120
gtctgctaat aagaagaaaa agagaagggc attctcttta cctttaagag gagtttgtgt     180
atatcacttt cactcagatc cctctggctc taactttgtc acgtcacaac cagttgcaaa     240
ggaggctggg aagtgagtga ctctgaccta ggcagccata tgttgcactt aatttttatt     300
actgcataag aaggagagaa cagattctgg ggagatagcc agctatctgt cacattaagg     360
tttgagtcag atttattyc attaaaaaa aaaaaatggc ctcaggcctg taatcccagc     420
aggytgaggc aggagaatgg cgggaacctg ggaggcatag cttgcagtga gccgagatgg     480
caccactgca ctccagcctg ggtgagagcg agactctctc tcaaaaaaaa aaaaaaaaaa     540
aaaaaagccg ttgattattt aaacagttaa ctttttgtt gttgttctgg aatgagtctt     600
ggttactgta tagtatgtat taaaaataac cattagcaat ctaggcatag tggtatgtgc     660
acagtccc                                                              668
```

<210> 1354
<211> 313
<212> DNA
<213> Homo sapiens

<400> 1354
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gctgacaata ccaaatgctg ggaaagatac agagcaacag gaactctcat gtcagagttc      60
ctgttgctct gtatctttcc cagcatttgg tattgtcagt ttaaacacaa atgctgggaa     120
agatacagag caacaggaac tctgacatga gagtaggaat gcaaaatgag acagccactg     180
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```
tggaagacag tttggcagtt tcttagaaag ttaaacacat ttactctatg gcccaggatc    240
tcattcctgg ggatttactc aagagcaatg aaaaccccac tcaaagatct ctacaatcca    300
aaaaaaaaaa aaa                                                        313
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<210> 1355
<211> 1082
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1065)
<223> n equals a,t,g, or c

<400> 1355
gcagtcactt tagtaaaata agtacattat attacatgtc attataatat tgtgttatca     60
cataaactga gcataccaca atccatattc tacggactgt cttctccttt ttccactgat    120
tacatgtgag tggttcttag ataacacacc ctaaagacaa agaaagaaag gaagagaaac    180
agaattaaca agagagggaa aagagtgtca gtttcctttg ctatgactat taaatgactc    240
agtgaatttt cttagggtaa agttactgcc attcaaaatt atagtaaatt ggtaatattt    300
tacagtcata tatttttkgt ttcagctgag tatatttkgt tycagcttaa gtatgggcac    360
atatctccca cactttttta gatcagatat gacacataaa aaagatggct ttggtttttt    420
aaaaactctt acaattagca actaatggca gtgtgaacat ataattggtt ttataggtaa    480
atcaatttgt cgacttacaa acttttaaga cttcatttgt tattcataac tacattttgc    540
tgaggaaaaa aatacttgtt tatgtcaaaa aggggagaat ttccattaag ttcatactct    600
ccatgatgag aaagcacacc ccgaaataag acattaaatg ttagaatgta ttacttttcc    660
tggttagaaa agaacttggc tttgggagtg gaccctatgc gtatcatggt gtggcaatgc    720
cattttgttt ccaaagataa catttgtaga tgtacagatg tcctgaactt tattaaacca    780
cagctgtggt tatcacatat ttattcaaaa gatattacag ctatcaaagc agtatgtcag    840
caaagtcctt agtagtttgc ttaaattgcc ctttcatttt actgtatctg taagtattca    900
accaatgtct ttaaaagcct gagtaaaaaa aaaaaaaaaa aaagaaaaca caaataagca    960
aacacgaagc attatttaca tggaagcatt cagaaatcat gaatagcatt atcacaaatg   1020
agttatgaca ttttataggt tcacaaaaac gagagaaaaa aaaanaaaaa gggcggcccg   1080
ct                                                                  1082
```

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<210> 1356
<211> 1316
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (37)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (48)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (61)
<223> n equals a,t,g, or c

<220>
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<221> SITE
<222> (121)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1305)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1308)
<223> n equals a,t,g, or c


<400> 1356
ccattttttcc ccccaggaaa ccancctatg cccatgnttt ccgccaanct tttaattccg     60
nctcccctat agggaaaacc tggtacgcct ccaggtcccg gtccggaaat tcccggggtc    120
naccccacgg cgtcccgcaa aacatcagtg cctttcaaat gctaaggaaa ctctgtcaaa    180
tgatctttct ttttttgttt tttgttttttt gtttttttggt ctcacaatat gtctcaccat    240
tttatagtaa caccttcttt ggtgtccagt aaaatgaaaa cttgagagat ttctactgct    300
tcaacaattt ttttaattac gtggagattt taattttcta tgagctatct gaaagaagag    360
tagaaaataa atacaatctt gaaaaatccc atgaaaacca taggcaaata ttaaatgatt    420
gaggcttttc tttttttaaaa cgtggctatg ttcttttttag atagcctgga ttcagggact    480
tgggaccttg taaagccaaa gctgattgac actcataagg atgtcttcct gtatgccatt    540
ctaatagaca cacatgttac ctgatagagc tgggcagagg tgcttcagtc tcaggctgaa    600
ggttctgaag tccagggaag ttgggtgctg cccagggtta caagccatga gtgggagagc    660
tcaagtataa gacacttagg ccagacttcg tttcacaagt ccaggctgct cctcaccaaa    720
attctgtgtg tatatatata tttttctttt ttctgattct catgcatatt gtagataatt    780
tggaatatac agtaaactga aaattctata tccacatttc tgtgagcttt ttaaaatgtg    840
agtgattact ggccaggcat gggggctcac atctataatc tcagcaattc gggaggctga    900
ggtgggagga taacttgagg cctggagttt aagacgagcc tgggcaacat agaaagaccc    960
tgtctctaca gggagaaaaa aaaaaaccta acaaacatta gccaggagtt tgagcccaag   1020
agtttgaagt tacagtgggc cttgatcgca ccactgcact gcagcctggg cgacagagca   1080
agatcctgtc ttaaaaaaaa aaaaaaaaaa aaaaaaaaaa agggcggccg ctctagagga   1140
tccaagctta cgtacgcgtg catgcgacgt catagctctt ctatagtgtc acctaaattc   1200
aattcactgg ccgtcgtttt acaacgtcgt gactgggaaa accctggcgt tacccaactt   1260
aatcgccttg cacacatccc cctttcgcca gctggcgtaa tagcnaanaa ggcccg       1316


<210> 1357
<211> 722
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (665)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (719)
<223> n equals a,t,g, or c


<400> 1357
ggaacaaaca aaaaatctc tctaacgttt tattctgcct tatcctcaat tggagaaagg     60
gatgaaggct gccacgtatt agctgtgatt tcttaacttc tctaccttta atttcctcat    120
ctatgagatg atgttgaacc tgtctacatc ataagtagtt aaggatgaaa tgaatgggta    180
tatgaacatt gtgttgggga cgtagtagat actcagcaaa tgtgtcttcc cagtgatgtc    240
acatttcctc tacttctgct tggtatgtgt ctcgttcccc tgagcccagc tcatgtcact    300
gtgacgtgag agggcaggtg aagtgttagt tgttcccact ccatcatgcc ctttcacagt    360
tgttagtctg atgctaaaga cttaagattt atttcttcat tgttgttgtt gttgtttttg    420
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tagagatcag gggttcgaga ccagcctggc caacatggtg aaaccctgtc tctactaaaa      480
ctacaaaaat tggccaggcg tggtggtagg cgcctgtgat cctagctact tgggaggctg      540
aggcaggaga atggcttgaa cctgagaggt ggaggttgca gtgagctgag atgacgccac      600
tgtgctccag cctgggcgac agagcgagac cctgtctcaa agaaaaaaaa aaaaaaaagg      660
gcggncgcyc tagaggatcc aagcttacgt acgctgcatg cgamgtcawa gccctccana      720
ag                                                                    722


<210> 1358
<211> 858
<212> DNA
<213> Homo sapiens

<400> 1358
ccacgcgtcc gaaaaaaggg ttatgtaagg aaagacaaga gtatgtttaa gacggtttct       60
accattttgc ttagggcagt ccctataatc ttagaggcaa cagtaagaga gtgaaatatt      120
gcaggcagtg aattgggcta atttgccatc actccgattt cttcaaaact ctcttaaaga      180
tgagttaatg ttgctggcct aaaatagtct catatatggg actcccttag aaatgatagt      240
gatagtgttt tatttaataa atctgctgtg atggtctaag gcaaacttga cttatggaat      300
tccagttagc actgttgatg ataataatta cagttggttt tgcatctgta cagcacttta      360
caattataaa tactctttat ggaagtagtt tccttgggat gatatatatc tggccattat      420
tctgttcaat aggtgtgcta tattatggca aatgttgcaa ttatcattgt acatattggt      480
atgtttattt gtatatagaa tcatactcat accacagagt ctaaagaagt agcagcagtg      540
tggtgtagtt agcaatcaag aacactggac cttaaataac tgggtccaaa tatcactttc      600
accatttatt cactgtgagt catgagaaaa ttgtttttagt tttgctgtct gtacaatggc     660
atactactac ctgtctcata cacacacaca ggcacacaca aagttttact aattggttca      720
tactaggaac tctccaagta tcaattatcc ctgttacaga aacagtatgt atagagagac      780
aatcatggag attccctgtc caaggatttt cctgatagct tcctctggtc catatcaaaa      840
tgaaaaaaaa aaaaaaaa                                                    858


<210> 1359
<211> 1206
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (38)
<223> n equals a,t,g, or c

<400> 1359
gaaaccccat ctctttaaaa aaaaaaaaaa tccaaaantt agctgggcat ggtggcatgc       60
agtggtagtc ccagctactc aggaggctga ggtgggagga tcactggaac ccgggagcag      120
agactgcagt gagctgagat cacactactg cattccagcc tgagcaacag agcaagacac      180
acacacacat caatttattt tagttgtata atgcttttct attagtaaag catcagctaa      240
gcttcagtgg cctgctccat cccctaatga ctcccatggg ctatcctaaa ggaacttcca      300
gaacctttgt tggtgtgttg acattgacca tgcagaccaa tttgggcaca actggacatt      360
gattcctttt acacaagagc tgcctcccaa agatagataa attttcccag ccctaaatat      420
gaatcatggg gcaagatatt ggtcgtattg atggtgaacc tttcctactg gattctttgc      480
atgccacata gcaggattca ttgccttct ctcatcatgg atggcatgca gcagcaccca      540
agtattcttc attctttgca gggaaaaaat tgtgcatggg ggctgaaatg tagtatgtgt      600
agctcaatta gtctctcctc tgtgatgcaa aatggaatat tcaatggcag atctgccctt      660
ctgagatgct gaccatccaa aacaccttgt ttatggtgca ccatgattag ctcacacaca      720
atgccaaggc tgtgcttcta ttatctgata catagtttga caatgggtaa ttctactcag      780
accctcccta ctgattggct aggatgcctg tcaggaactc attatgctac tggttgtttg      840
gggatcccca tagtggacta ctttcaggaa tggcatgaat tgtaaccaac tgagtgctgc      900
ccccactgtt acggaagttt ataaaacctt agttccagaa gacccaaagg agagtactgg      960
tttgtgtttg gtgcttggcc tagatccagc caccactctg aaactcatca catcttcatt     1020
gacagggagg gagcccagga catatgtgtg gctcattgac cagaaggctt tcttagtccc     1080
aacagccatg aaccatgcac ttatggatac ccagcctttt agggctacgt gaaatgcatc     1140
cttgtaacat cattgtattc tttcaataaa tagccttctg agttgaawaa aaaaaaaaaa     1200
aaaaaa                                                               1206
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<210> 1360
<211> 2102
<212> DNA
<213> Homo sapiens

<400> 1360
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ccacgcgtcc  gcagccttgg  aaaggaaagc  agctgagatc  cagaggagtg  gaaggctccc     60
ccttgactaa  agctaaatca  ctaaaccttg  gccatggtca  cttcctcttt  tccaatctct    120
gtggcagttt  ttgccctaat  aaccctgcag  gttggtactc  aggacagttt  tatagctgca    180
gtgtatgaac  atgctgtcat  tttgccaaat  aaaacagaaa  caccagtttc  tcaggaggat    240
gccttgaatc  tcatgaacga  gaatatagac  attctggaga  cagcgatcaa  gcaggcagct    300
gagcagggtg  ctcgaatcat  tgtgactcca  gaagatgcac  tttatggatg  gaaatttacc    360
agggaaactg  tttttcctta  tctggaggat  atcccagacc  ctcaggtgaa  ctggattccg    420
tgtcaagacc  cccacagatt  tggtcacaca  ccagtacaag  caagactcag  ctgcctggcc    480
aaggacaact  ctatctatgt  cttggcaaat  ttgggggaca  aaaagccatg  taattcccgt    540
gactccacgt  gtcctcctaa  tggctacttt  caatacaata  ccaatgtggt  gtataataca    600
gaaggaaaac  tcgtggcacg  ttaccataag  taccacctgt  actctgagcc  tcagtttaat    660
gtccctgaaa  agccggagtt  ggtgactttc  aacaccgcat  ttggaaggtt  tggcattttc    720
acgtgctttg  atatattctt  ctatgatcct  ggtgttaccc  tggtgaaaga  tttccatgtg    780
gacaccatac  tgtttcccac  agcttggatg  aacgttttgc  ccctttttgac agctattgaa    840
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gtcagcctaa  atatgacagg  aagtggcatt  tatgcaccaa  atggtcccaa  agtgtatcat    960
tatgacatga  agacagagtt  gggaaaactg  ctcctttcag  aggtggattc  acatccccta   1020
tcctcgcttg  cctacccaac  agctgttaat  tggaatgcct  acgccaccac  catcaaacca   1080
tttccagtac  agaaaaacac  tttcagggga  tttatttcca  gggatgggtt  caacttcaca   1140
gaactttttg  aaaatgcagg  aaaccttaca  gtctgtcaaa  aggagctttg  ctgtcattta   1200
agctacagaa  tgttacaaaa  agaagagaat  gaagtatacg  ttctaggagc  ttttacagga   1260
ttacatggcc  gaaggagaag  agagtactgg  caggtctgca  caatgctgaa  gtgcaaaact   1320
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tccctcagtg  gcacatttgg  aacagagtat  gtttttcctg  aagtgctact  taccgaaatt   1440
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tacagctcat  gtgggaccag  caattcagca  ataacttacc  tgctaatatt  catattatta   1620
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tgcatcatat  gcttggctga  atgtgtttat  cggcttccca  agtttactaa  gaaactttga   1740
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tttttaagta  ttatgataat  gttgtccatt  tttttggcta  ctctgaaatg  ttgcagtgtg   1860
gaacaatgga  aagagcctgg  gtgtttgggt  cagataaatg  aagatcaaac  tccagctcca   1920
gcctcatttg  cttgagactt  tgtgtgtatg  ggggacttgt  atgtatggga  gtgaggagtt   1980
tcagggccat  tgcaaacata  gctgtgccct  tgaagagaat  agtaatgatg  ggaatttaga   2040
ggtttgtgac  tgaattccct  ttgacattaa  agactatttg  aattcaaaaa  aaaaaaaaaa   2100
aa                                                                      2102
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<210> 1361
<211> 1289
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1254)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1285)
<223> n equals a,t,g, or c

<400> 1361
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ggaattcccg  ggtcgaccca  cgcgtccggg  gagctcagcc  gagggctgca  caaagacctt     60
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794

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cctggcctgc cccagacaga gctgaggacc cctggccgtg ggcttgggcc tcggcttcac      120
aggatggggc tgccagtgtc ctgggcccct cctgccctct gggttctagg gtgctgcgcc      180
ctgctcctct cgctgtgggc gctgtgcaca gcctgccgca ggccgaggac gctgtagccc      240
ccaggaagag ggcgcggagg cagcgggcga ggctgcaggg cagtgcgacg gcggcggaag      300
cgtccctact gaggcggacc cacctctgct ccctcagcaa gtcggacacc agactgcacg      360
agctgcaccg gggcccgcgc acagcagggc cctgcggcct gccagcatgg atctcctgcg      420
cccacactgg ctggaggtgt ccagggacat caccggaccg caggcagccc ccctctgcct      480
tcccacacca ggagctgccc cgggctctgc cggcagctgc agccaccgca gggtgcgctg      540
gcctcgaggc cacctattcc aacgtggggc tggcggccct tcccggggtc agcctggcgg      600
ccagccctgt ggtggccgag tatgcccgcg tccagaagcg caaagggacc catcgcagtc      660
cccaagagcc acagcagggg aagactgagg tgaccccggc cgctcaggtg gacgtcctgt      720
actccagggt ctgcaagcct aaaaggaggg acccaggacc caccacagac ccgctggacc      780
ccaagggcca gggagcgatt ctggccctgg cgggtgacct ggcctaccag accctcccgc      840
tcagggccct ggatgtggac agcggccccc tggaaaacgt gtatgagagc atccgggagc      900
tgggggaccc tgctggcagg agcagcacgt gcggggctgg gacgcccccct gcttccagct      960
gccccagcct agggaggggc tggagacccc tccctgcctc cctgccctga acactcaagg     1020
acctgtgctc cttcctccag agtgaggccc gtcccccgcc ccgccccgcc tcacagctga     1080
cagcgccagt cccaggtccc cgggccgcca gcccgtgagg tccgtgaggt cctggccgct     1140
ctgacagccg cggcctcccc gggctccaga gaaggcccgc gtctaaataa agcgccagcg     1200
caggatgaaa aaaaaaaaa aaaaaaaaa agggcggccc tctagaggat ccangcttac     1260
gtacgcgtgc atgcgacgtc atagntctt                                       1289

<210> 1362
<211> 868
<212> DNA
<213> Homo sapiens

<400> 1362
gggtttatca aaaaatgtca tgaatgtttc tatatttctt gttggtttat ttctcattat       60
tgagttatat attgctggaa gtttaacaac ttctcttgaa ttccaacagg aagcatttgc      120
taggtaggca tttggtacct aatggataat cttttcatgat ggataaatct gcccacatcag     180
tctctcttga cttttgaaaat taaaatctgg gcactttggg aatttctgct gtcttaattg      240
gctggcctgt cctgtgaaca gccgtcttct ctaaàtggta taataactgc atttcagcgc      300
tgtctcattg tgagtctttt tgaaagcttt taaaatgatg ttgtgtgatc caaatttaaa      360
ttaatagtta agcagtgtgt ctaccacca atgcaaataa ctcaactgaa tgacaattgg       420
atcctgcttc actcagtttg cgcataaatg gttgaggaaa actacatcat aggtgacccc      480
cgttggtggt agccaaattt catagtctac tgtgtgaacc atcatgattt cagaagcact      540
aaaatataga aacatacatt cttggccagg cacagtggcc catgcctgta attccaacac      600
tttgggaggc cgaggtgggc agatcacttg aggccaagag tttgagacta gcctgtccaa      660
catggtgaaa ccccatctct actaaaaata cmaaaattac ccaggtttgg gggtgcatgc      720
ctgtaatccg agctacttag gaggctgagg catgagaatt gcttgaacgc cggaggcaga      780
ggttacagtg agccgagatc gcaccactgc actccagcct gggtgacaga gccaccctgt      840
ctcaaaaaaa aaaaaaaagg gcggccgc                                         868

<210> 1363
<211> 2929
<212> DNA
<213> Homo sapiens

<400> 1363
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cgaggagcca tgaggcgcca gctgcgaagg tggcggcgct gctgctcggg ctgctcttgg      180
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gcaacacgcc tccgcccccg tacgaacagg tagtgaaggc caagtagtgg ggtgcccacg      660
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<210> 1364
<211> 1141
<212> DNA
<213> Homo sapiens

<400> 1364
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cctcgatgtc acatcagagt gctctctcct gggtgggaac ccgcgcacgg aggaaacact    180
ttaccagagt aaacgagatt ataacttgtt tgccagagaa cctctcctgt ggccatgcct    240
gaacctctcc tgggactgtc cgtggtcttc acattggtgc ttggacaccc gtccttcggg    300
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ctggcattgg tatagacaga taccaatcac tgcacagaca tttccagggg cccttcccca    420
gccatgttta gtggcactga cctcaggcag ctgggccccc gggacagcaa ccaggggact    480
gccctggccc tggatggcag ccgggaccgg ctcacaagct tctgtttgga gcagttctgt    540
tggcagcccc ccgcctccag tggagatgtg acacgactct ttcttgcctg ccaaacgttc    600
tctgattctt tggatcatcg atcctaacac agcaaaggcg gtattgttgc tgtcctttca    660
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796

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accagcagca gatgggactc ctcctccagg aacctgctac cagctaggcg tggtggtgca     1020
agcctatact tctggcactt tgggaggctg tggcaggagg atcacttgag gccaggaatt     1080
tgaggccagc ctgggcaaca tagtgagacc acgtctcttt ttgaaaaaaa aaaaaaaaaa     1140
a                                                                      1141


<210> 1365
<211> 1285
<212> DNA
<213> Homo sapiens

<400> 1365
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attttagtat ctcaaatgct ttaaagtgag tggaattttg actgtacagt tccttctagc     180
agaaatcagt aaaccttgta agatgcttca acaaaaaatg gggttgattc cttggcactt     240
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gaggcaggga tggaggtagc aggatggcgt gggtgggatt agcaagtctc ggagtctgtt     360
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tcatccttga tactggttgt gtcatctcag acccacgggt tagtatggta gcttcactgg     540
gcttttgggg ctgggtctga cttttgcatct gattgctctg ggcctgtcat tagcatccct     600
gtaaggagag ggaacggagt cagttcaggg atattcttgc cagaaaatct ggggtcgaaa     660
tctccttcca cttttcctcc cagcagattg gactcattgg cgctctcatg ttgaatttca     720
aactttaaga tgagttggtc actggaaagg agtttgctgg gattacaggc gtgagccact     780
gcgcccggcc acattcagtt cttatcaaag aaataaccca gacttaatct tgaatgatac     840
gattatgccc aatattaagt aaaaaaatata agaaaaggtt atcttaaaata gatcttaggc     900
aaaataccag ctgatgaagg catcttaggc aaaataccag ctgatgaagg catctgatgc     960
cttcatctgt tcagtcatct ccaaaaacag taaaaataac cacttttttgt tgggcaatat    1020
gaaattttta aaggagtaga ataccaaatg atagaaacag actgcctgaa ttgagaattt    1080
tgattttttta aagtgtgttt ctttctaaat tgctgttcct taatttgatt aatttaattc    1140
atgtattatg attaaatctg aggcagatga gcttacaagt attgaaataa ttactaatta    1200
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caacacaaaa aaaaaaaaaa aaaaa                                           1285


<210> 1366
<211> 1796
<212> DNA
<213> Homo sapiens

<400> 1366
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gatgatccat gaccagggtg atctgattga tagcatagaa gccaatgtgg aaagctcaga     180
ggtgcacgtc gaaagagcca ctgaacagtt acagcgagct gcttactatc agaaaaaaatc     240
tcgcaagaag atgtgtatcc tggtgcttgt cctgtcagtg attattctaa tcttgggact     300
tattatctgg ctagtttata aaacgaatga ttgcctccga tcgttctccc gctgagctgt     360
tttcaagggc aagtgcttgt tgaagtcttg ccagaacaaa ctgatcacaa gaagacagca     420
tatatcagaa cgtcctgtaa tcatttagtt agaaactaac tactaactag tctttggaat     480
tcgtgaccta tggagacagt aattatcaat ttattgattc tattgatttc tcaaattagg     540
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tactgaaaat tccattctag atattcttgt tttgacaaat gacactacag tctcgtaata     660
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tctggtaccc agtatattgg agtctgtcag aaactctata ataggccacc agttttttatt     780
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cattatctgc tagtgtcatc cacagcagtt catcctcatc cacactaagc catcctgtta    1020
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tgtctgcata gaaaggcaga attagacata gcatgctttg gaaaagcaaa taggaattgt    1140
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797

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cacaggccta gaacagttaa agggaacata atttgtttag gctcccacat aaatgtgaat   1560
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atgtgaacag tagggaagca agggcccaaa tgcataagtt tctttgcact gttgcactta   1740
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<210> 1367
<211> 770
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (745)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (761)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (770)
<223> n equals a,t,g, or c

<400> 1367
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ctgggcaaca agagcaaaac ttgatagctt tgcataggga agagggcat tgatgctggg    180
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gctcatggaa ggcgagtggg aacccggctg cctgcctttt tttctgatcc agaccctcgg   600
cacctgctac ttaccaactg gaaaatttta tgcatcccat gaagcccaga tacacaaaat   660
tccaccccat gatcaagaat cctgctccac taagaatggt gctaaagtaa aactagttta   720
ataaraaaaa aaaaaaaaaa aaacncgggg ggggccgg nacccaattn                 770
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<210> 1368
<211> 1444
<212> DNA
<213> Homo sapiens

<400> 1368
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atggatggac tttatccagc atttgggagt ttgctgtttg gttgctctta tttcagtggg   180
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gacttgcaac ctaagggcaa agagcttttc catacatttt ccacttttga aaaaatatat   480
tgaggcaatt cagtggattt atggccttgc cactccacta agtgtatttg atgaccttgt   540
ttcttggaac cagaccctgg cagtctctct tttcagtccc agccatgtcc tggaggcaca   600
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                                      798
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tggcactggc ctcttcatga agcgattttt gggcccttgt ggttggaagt atgaaaacat    780
ctacatcacc agacaatttg ttcagtttga tgaaagggag agacatcaac agaggccctg    840
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gtaaaaagcc agcaaactat cttcaaactc ttccgtcctt aatgtcttcc atggctattg   1380
cccccacaat ggtctctttt ctccctgctc ccttattaaa gaactctttc tgaaaaaaaa   1440
aaaa                                                               1444

<210> 1369
<211> 1892
<212> DNA
<213> Homo sapiens

<400> 1369
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cctgctcaag ctattttggc agtctgagag aacagtacat tctgaaccac attgacgcag    180
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gtgtatttga tgaccttgtt tcttggaacc agaccctggc agtctctctt ttcagtccca    720
gccatgtcct ggaggcacag ctaaatgaca gcaaagggga agtcctgagc gtcttgtacc    780
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tcaggtctag gatggcagtc actattcatg ccggataata gagaactatg tgacgcagtc   1500
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gatcttgcct gtgtcacaat gtaacaagac tctagctggg tcccctggtg atgagtttca   1680
gcatagaata tgttcaagg aaaagaaac gaaaacagtt taaatctcta ccacagcctc   1740
acaagcaaat gctaagggga acatacatgt aaaaagccag caaactatct tcaaactctt   1800
ccgtccttaa tgtcttccat ggctattgcc cccacaatgg tctcttttct ccctgctccc   1860
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<210> 1370
<211> 2509
<212> DNA
<213> Homo sapiens

<220>
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799

<400> 1370
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ttgagtaaag catggtgcta atggaccagg gtcacagttt caaaacttga acaatccagt     180
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gaaacgtttt aaattctctt tattcataat gttctttgaa gggtttaaaa caagatgttg     480
ataaatctaa gctgatgagt ttgctcaaaa caggaagttg aaattgttga dacaggaatg     540
gaaaatataa ttaattgata cctatgagga tttggaggct tggcatttta atttgcagat     600
aataccctgg taattcncat gaaaaataga cttggataac ttttgataaa agactaattc     660
caaaatggcc actttgttcc tgtctttaat atctaaatac ttactgaggt cctccatctt     720
ctatattatg aattttcatt tattaagcaa atgtcatatt accttgaaat tcagaagaga     780
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aagcaaggat agagaaacac tttagagata tgtggggttt tttaccattc cagagcttgt    1860
gagcataatc atatttgctt tatatttata gtcatgaact cctaagttgg cagctacaac    1920
caagaaccaa aaaatggtgc gttctgcttc ttgtaattca tctctgctaa taaattataa    1980
gaagcaagga aaattaggga aaatatttta tttggatggt ttctataaac aagggactat    2040
aattcttgta cattatttt catctttgct gtttctttga gcagtctaat gtgccacaca    2100
attatctaag gtatttgttt tctataagaa ttgtttttaaa agtattcttg ttaccagagt    2160
agttgtatta tatttcaaaa cgtaagatga ttttttaaaag cctgagtact gacctaagat    2220
ggaattgtat gaactaatga tctggaggga ggggaggatg tccgtggaag ttgtaagact    2280
tttattttt tgtgccatca aatataggta aaaataattg tgcaattctg ctgtttaaac    2340
aggaactatt ggcctccttg gccctaaatg gaagggccga tattttaagt tgattatttt    2400
attgtaaatt aatccaacct agttcttttt aatttggttg aatgtttttt cttgttaaat    2460
gatgtttaaa aaataaaaac tggaagttca aaaaaaaaaa aaaaaaaa             2509
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<210> 1371
<211> 2101
<212> DNA
<213> Homo sapiens

<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2024)
<223> n equals a,t,g, or c

<400> 1371
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cctgtgcaag aaaggatgtg gttactacgg caaccctgcc tggcagggtt tctgctccaa    180
gtgctggagg gaagagtacc acaaagccag gcagaagcag attcaggagg actgggagct    240
ggcggancga ctccagcggg aggaagaaga ggcctttgcc agcagtcaga gcagccaagg    300
ggcccaatcc ctcacattct ccaagtttga agaaaagaaa accaacgaga agacccgcaa    360
ggttaccaca gtgaagaaat tcttcagtgc atcttccagg gtcggatcaa agaaggaaat    420
tcaggaagca aaagctccca gtccttccat aaaccggcaa accagcattg aaacggatag    480
agtgtctaag gagtkcakag aatttctcaa gaccttccac aagacaggcc aagaaatcta    540
taaacagacc aagctgtttt tggaaggaat gcattacaaa agggatctaa gcattgaaga    600
acagtcagag tgtgctcagg atttctacca caatgtggcc gaaaggatgc aaactcgtgg    660
gaaagtgcct ccagaaagag tcgagaagat aatggatcag attgaaaagt acatcatgac    720
tcgtctctat aaatatgtat tctgtccaga aactactgat gatgagaaga agatcttgc    780
cattcaaaag agaatcagag ccctgcgctg ggttacgcct cagatgctgt gtgtccctgt    840
taatgaagac atcccagaag tgtctgatat ggtggtgaag gcgatcacag atatcattga    900
aatggattcc aagcgtgtgc ctcgagacaa gctggcctgc atcaccaagt gcagcaagca    960
catcttcaat gccatcaaga tcaccaagaa tgagccggcg tcagcggatg acttcctccc   1020
caccctcatc tacattgttt tgaagggcaa cccccacgc cttcagtcta atatccagta   1080
tatcacgcgc ttctgcaatc caagccgact gatgactgga gaggatggct actatttcac   1140
caatctgtgc tgtgctgtgg ctttcattga gaagctagac gcccagtctt tgaatctaag   1200
tcaggaggat tttgatcgct acatgtctgg ccagacctct cccaggaagc aagaagctga   1260
gagttggtct cctgatgctt gcttaggcgt caagcaaatg tataagaact tggatctctt   1320
gtctcagttg aatgaacgac aagaaaggat catgaatgaa gccaagaaac tggaaaaaga   1380
cctcatagat tggacagatg gaattgcaag agaagttcaa gacatcgttg agaaataccc   1440
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tgataaactt cctccaccac tgcaacctca agtttatgca ggatgatcac aatttagtgg   1560
agagtattta tttgagccta aattgtaggt agcccttact acactcaact gattgggatc   1620
tagaatgtaa ctaaattgct tataaatgtc agagcatttt ttaaaggtac agtatatggg   1680
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ttaaaggatt aaacaaatga atgctacaaa gtgtatgttc aagaaaatta aatggtacca   1920
ctcttccaca gtttggaata attttataat tgtaaagata gaaattatat tgatargtaa   1980
atatgtaaaa ttgtaaatat gtaaaanaaa gaatggtgtc tgcngtgcat ggcattttat   2040
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t                                                                   2101
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<210> 1372
<211> 1322
<212> DNA
<213> Homo sapiens

<400> 1372
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tgccttcttg atgccagcct gctgcaacag accctccccg cgccctccc cagcccatct    180
tactgcaagc agcgtcctga ggagacagcg gcacgttcta gctgcgtctg cggccagccc    240
gtgccagtgg agtgggctcc gcgttgctca ttctctccga caggttgtca gcctctgtcc    300
ccgctgcaca gggtcttgcc ccttctccgg ggcctgtgcc agctcccttc cctccccgtt    360
stcctgtccc cacagccatt ctgggagctg gggaacctgg tctcaaggca ggccctgcag    420
ttccacagag gtggcaggtc ttgccctttg gccaacagat ttcttgtcct gccttctaga    480
tgcctctgag ctcccaaccc agggcagcca tggcttctca tttacaccaa caggtttcag    540
ttccaacaga aaggtcgggg taggttcgtg cagagatggg gctggcaggg gggctatggg    600
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aggattattt taacagatca agaaaatgaa gccaaatcaa gtgaattaaa ttcctcacaa      660
ttattttctt tccctgaggt ttgattggca cagcagcaaa agttgaggcc accccacttg      720
tgtccactgt ttttagaaaa aaatgaatgg cttcctgcca ttgtggggct ggactcttgg      780
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agaggatttc ctggcggtg ggaaggaatg gctgggcgg ccagtttga cacgccccag      1020
tgccctggag aacaaccagg gtcatctgca cttgatgact gctccccgac ccccagcccg      1080
gacacctcat tcccctccca ctacagggat caagtgacct gggaagaacc gagttyaaca      1140
ccaggatgtg tttccttaga tttccttttcc taggcgattt ccaggagag ccctgattgg      1200
acaatcacat cacagatcac actgcagttt ccatgttagc actgtggatg ggttttttaat      1260
caataaaaac tgggggtttc ttctcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaactcg      1320
ag                                                                     1322


<210> 1373
<211> 1111
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (115)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1095)
<223> n equals a,t,g, or c

<400> 1373
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gcakscgctc gtmacccgcg tratgctgtt tctggcgttg ggcagcccgt gggcngtcga      120
actgmctctc tgcggaagga ggactgcatt gtgtgcggcc gccgcgctcc gaggtccccg      180
ggcctctgtc tcccgggcgt cctccagcag cgggccttcg gggccggtag ccggctggag      240
tacggggcct tcgggagccg cgcgccttct ccggcgtccg ggtcgagcgc agatccctgt      300
ttattgggaa ggatatgttc gattcttaaa tacgccatct gacaaatcag aagatggaag      360
gctaatttat actggcaata tggcccgagc agtgtttggt gtgaaatgtt tctcttattc      420
tacgagtctg attggcctta catttctgcc atacatttt acacaaaata atgctatttc      480
tgaaagtgtg cctctgccta ttcaaatcat attctatggc atcatgggaa gctttacggt      540
gatcacccca gtgctgcttc actttattac aaaaggctat gtcattcgat tgtaccatga      600
ggccacaaca gacacttata aagccattac ctacaatgct atgcttgcag aaacgagtac      660
agtgtttcac cagaatgatg tgaagattcc agatgctaaa catgtattta ccacatttta      720
tgctaaaaca aaatcactgt tagttaatcc agtgctcttt ccaaaccgtg aagactatat      780
ccatctaatg ggttatgaca aagaagaatt tattttgtat atggaagaar ccagtgaaga      840
gaaacggcat aaagatgasa aatgagccta tttgttagtg ttcgtgctya aatgtgattt      900
acgttttaat gtataataat aaaattgcct tttgcattcc gttagtgact gattgttaaa      960
aataatttga aattatcaaa gcttttaatt tccagagaat gatgtttgtt tataataaaa     1020
caagctatgt ttgaaaacca aaatgtagta tctaccattc gtgttttaga aaggtatgtg     1080
aataaatatg ttctntgaag atcggactgg t                                    1111


<210> 1374
<211> 1514
<212> DNA
<213> Homo sapiens

<400> 1374
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tctgaggcag atacccagga actaacccag atcctgagga ggatgaaggg gctggccctg      180
gaggccgaga gtgagctgga gagacaagac gaagccctgg atggcgttgc agcagctgtg      240
gacagggcaa ccttgaccat cgacaagcac aacaggcgga tgaagaggct gacctagggg      300
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802

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cagaacgtcc ctgcattcct gtctcaccct gcacatcccg ctgagatgga gggctgggcg    360
gcagtgccag ggctgcagag gcctgtggcc ctccggagtg gtcttcctct ggatgggggct   420
gctactgtgg ggctgcttct gcaccagggg cctccccagg tgtgcaccat gcctgcctcc    480
cacttggctg tccctgctgc tgggcaggac ccggccacat gttctgcgga tgctgcagaa    540
gtgtggacca tggcgggacc ccaaggacac ttggcacagg cctggaagag gccgccctcg    600
tcttgtctcg gctccctttc atggacagac tggccttctt agctgtacta taaatttgtg    660
agtgaagtta gagcccagct cacttagcca gctcactttg agggcatcct ataaacaccc    720
aactgttctt ttatcgtctc ggttttagcc aaaagtgaaa ttagcatgac tgcatctttc    780
aaacaaaaat attgatttct gcttttaggg ccccgtttcc atccagaaat aaagggaaat    840
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attcggcacg aggtgaaatt gacctgcccg tgaagaggcg ggcatgacac agcaagacga    960
gaagacccta tggagcttta atttattaat gcaaacagta cctaacaaac ccacaggtcc   1020
taaactacca aacctgcatt aaaaatttcg gttggggcga cctcggagca gaacccaacc   1080
tccgagcagt acatgctaag acttcaccag tcaaagcgaa ctactatact caattgatcc   1140
aataacttga ccaacggaac aagttaccct agggataaca gcgcaatcct attctagagt   1200
ccatatcaac aatagggttt acgacctcga tgttggatca ggacatcccg atggtgcagc   1260
cgctattaaa ggttcgtttg ttcaacgatt aaagtcctac gtgatctgag ttcagaccgg   1320
agtaatccag gtcggtttct atctacttca aattcctccc tgtacgaaag gacaagagaa   1380
ataaggccta cttcacaaag cgccttcccc cgtaaatgat atcatctcaa cttagtatta   1440
tacccacacc cacccaagaa cagggtttaa aaaaaaaaa aaaaaaaaa aaaaaaaaa     1500
aaaaaaaaaa aaaa                                                    1514


<210> 1375
<211> 2799
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2794)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2799)
<223> n equals a,t,g, or c

<400> 1375
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acttctttc tctaagactt acaaattaca agaacgatct gatcttacag tcaaggaaaa    180
agaagaactg attgaagagt ggcaaccaga acctcttgtt cctcctgtcc caaaagacca    240
tcctgctctc aactacaaca tcgtttcagg ccctccaagc cacaaaactg tggtgaatgg    300
aaaagaatgt ataaacttcg cctcatttaa ttttcttgga ttgttggata accctaggggt   360
taaggcagca gctttagcat ctctaaagaa gtatggcgtg gggacttgtg gacccagagg    420
atttatggc acatttgatg ttcatttgga tttggaagac cgcctggcaa aatttatgaa    480
gacagaagaa gccattatat actcatatgg gatttgccac catagccagt gctattcctg    540
cttactctaa aagaggggac attgtttttg tagatagagc tgcctgcttt gctattcaga    600
aaggattaca ggcatcccgt agtgacatta agttatttaa gcataatgac atggctgacc    660
tcgagcgact actaaaagaa caagagatcg aagatcaaaa gaatcctcgc aaggctcgtg    720
taactcggcg tttcattgta gtagaaggat tgtatatgaa tactggaact atttgtcctc    780
ttccagaatt ggttaagtta aaatacaaat acaaagcaag aatcttcctg gaggaaagcc    840
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aagagaatcc aggtattttt gcagtgttga aggaaaagtg cggacaaatt cataaagctt   1140
tacaaggcat ttctggatta aaagtggtgg gggagtccct ttctccagcc tttcacctac   1200
aactggaaga gagcactggg tctcgcgagc aagatgtcag actgcttcag gaaattgtag   1260
atcaatgcat gaacagaagt attgcattaa ctcaggcgcg ctacttggag aaagaagaga   1320
agtgtctccc tcctcccagc attcgggttg tggtcacggt ggaacaaaca gaggaagaac   1380
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803

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tggagagagc tgcgtccacc atcaaggagg tagcccaggc cgtcctgctc taggcagagt    1440
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atggagtggc ctgaaagaga gcaagaacat gtggatcttt gataggattg ttaccaaatg    1560
gtgtcagtat ggaccaattg tgtgaccatg agaaggatgc ttattttttt taaaaagaaa    1620
acacatctaa aagcccagga actgattttt ttaagaggaa aactaatgac agtgtataac    1680
tgatgtttaa attgtgcatt tagtactatt taaatgtttt cttatactag tattttatat    1740
tcttttgttg tcgttaaaa ctggagcttc agtgtctctt ccctccctct aatagtaatg    1800
gttcagtaag cactccttaa ctccttagta tttcatagaa aaatgactgc aacattaaag    1860
ctaagaggaa cacttcarca tatgtggtac aaatttatat tgaagatcta aataaaccac    1920
gtattttcca gtcttcgttg tgtgaagcta aatggtggct aaaaggaaca cttttttgtgt   1980
gattattata aactttgcat tgtatttgaa tcttagaact tttgtacaca ctaaatattg    2040
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gtgagcaata atttaaatca gaagctattt tattttaatg taattaacct ttctttacat    2160
ttcttatgtg ttcacctcta atctgtttta ggaagagagt tggttattat gttgatccca    2220
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tgggtttgcc tagggacgtg taactacagg cttttactaa gccaaggaaa aagagaattt    2340
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tttttaagca gtactttacc tgttttttct ttagcaaacc aggttatgtg gtgtaaaggt    2460
ttgttatacg tgccacaata tagcatataa atattatgcc atcattcctt ctcttgttaa .   2520
aggtagaaga ataaaattgt gattttata acctgtgctt attactcaaa tggtcttcaa     2580
catcttttta aacaacacat acttttgaa tgttcagttt ctatttgct tgaggtattt      2640
tgtacatatg tgccttgtga ttgctgctgc tttaaaggat aaagtactct ttgggggatg    2700
agtctggttt gttttgtttt attttttaat gaaataaacc tatattcctg aaaaaaaaaa    2760
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaangggggn                         2799
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<210> 1376
<211> 990
<212> DNA
<213> Homo sapiens

<400> 1376
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taggtcaggg gtatcagcct cagccactca gacaaggaaa gggggcacca catgagctca    120
gggacccca ccccatccc tggcctgggt gatggtacag cgtctggccc tgccaggtcc      180
ttggcctgca caaagtcagt gacagcaggt gaaatgccca gctgggtgcc tgcctggagc    240
gggtgtgggg cagtgagccc ctgtgggtgt gggcttggga gtggctgtga caggtggtga    300
gcagggcagg ggcaatcaga cagccctcag aaggcctcat ggcccccggt gagctgcagg    360
aagaggtctt catccagctc ctccccacgg gcccgctccc gcgtcgacag gaaaatgtag    420
cccccgatat actcgtgtac aattcggcag ctggcagaca cgcagctgaa ggccacattg    480
atgtgttcat caaactcgat ggccactgcc ggatgtccca gttgacattc cactggcgca    540
tgttgctgaa acgccaggtc ttgaccacgt cgcccacggc caagtcgatg cggatcagtc    600
ggttgttggc gatgcccagg atctcgtctt tcctgctgcc cttgaacctg accatgacat    660
aggagatgcc gaagtcgggc agggactgcc aggcctggat gaagcgcagc tgggcctctg    720
ccagcgacaa ctgggccaca ttctggtggg cttccaggat ccgtggggtg agctgcttgg    780
ccttgaactt tcgctggaaa cggggggcaa caaggccgta ggggttgagg ccctcggcag    840
aggcatcagg gccgtggggg tggttgcccg ggcccccact gcccgtgcgc tgcaggctga    900
ggaaggccag gatggcctgc acctcgctgg tgtagctgct gtcggccatg gtgcggcctt    960
tggaggccag gcggcagcca gcctcgtgcc                                      990
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<210> 1377
<211> 1316
<212> DNA
<213> Homo sapiens

<400> 1377
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acttcactta gaataatggt ctccagctcc atccaggttg ctgcaaatgc cattatttca    120
ttccttttat ggctgagtaa tattccatgg tagaatgtta cttttgttta tctacttgtt    180
ggttgatggg catttaggtt ggttccatat tttcgcaatt gcaaattgtg ctgctataaa    240
catgcatgtg caagtgtcct tttcaaataa tgacttcttt ttattaacac cctgtagtta    300
ataacctgaa ttctttatag cttgcattct gaaacatttt tctcgaacta ccgccttct    360
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ggcctgttcc agtcattctg gctttcatct tgatttgttt ttcttaaaac tttctccagc    420
ttccctctgc atctgtgatt cgtgctctgc ttcttgtttg tggctttgga tcaataatgc    480
tacagatcca gtctaattaa tcatggatca aaagctaaag catccttccc ccagatggtt    540
tattattaat accacccaga aaaataattt ataatttaat tctctacctc atagagtttg    600
ggatccttgg tagaatgtgt tcccttcccc ttttcttctt cgctatttcc tcctcttcct    660
ctccatcaaa agtggcttta tctccacctt tgcagctgac agcaaccctc ccatgctccg    720
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tctcctgtga tctcaaggcc tcggagaaat gatctcaagg cctcggagaa atgaaaagtg    840
acctttggta tttgagacaa ccaatagcaa aatatagctc ccacttccaa cagcccatat    900
tggtggggga gggatttgct tcatacgtgg tctgtgttgg gccattctcc ttctccatgt    960
tttctctgtt cttacagcac catctttttg cctcatttct ttgctctact ctattcctcc   1020
cccatcatcg tctggtgact cacactgtaa tcctagcact ttcggaggat cacctaaagt   1080
caggagtttg aggccagcct ggccaacatg gcaaaacccc gtctctacta aaaatacaaa   1140
aattagctgg gcgtggtaat gggcgcctgt aatcccagct actcaggagg ttggggtggg   1200
agaatcacgt gaacctggga ccgggaggct gcagtgagcc aagatggtgc cactgcactc   1260
cagcctgggc aacagagcga gactccgtct caaaaaacaa aaaaaaaaa aaaaaa        1316
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<210> 1378
<211> 1146
<212> DNA
<213> Homo sapiens
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<400> 1378
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gaagcccagt gagctgcttc tgacagaggt accaagagac tacaggggaa ctaatgggat    120
tgtcctcagt gacatcagtt ttaccagctg gggactttgt ttgaatgccc tggatttact    180
cactgaccac tctggaaatg caatctattg attgataacc ctccttgaac ttatctgtaa    240
aaccattcat gaaatatttt atgtttccat aggctggcaa gttctcattt ttgtgtgtta    300
gattttcatg gtgaccctct ggctctataa ttctttattt tgaaaaaaca caaccatgtt    360
tactctgtca ttactcttca agctttttcg tatttcattt tcccttcctt ttagaaggag    420
tgttttcaca ctgtagcttt tctcatttct ttatgcaatc accctgagag atcgaaagtt    480
attaagcata ataacctata ttgtgtcaaa ttgtgggtac atccaaagtg cagccatgcg    540
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cagaatatat ccaattagca ttagtggatt tctaatttca cttgacacat tcatcataat    660
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atgaccagag ttagagctga aataatagct tgttgaagaa gagaaaattg taataaattg    960
ctttatcaaa cttgctttca aaacctgttt tttaagttgg gcacagtggc tcacgcctgt   1020
aatcccagca ctttgagagg ccaaggtggg tagatcacgt gagctcagga gttcaagacc   1080
agcttgggca acatagcaag acttcatctc aaaaataaaa tagcgttaaa aaaaaaaaa   1140
aaaaaa                                                                1146
```

```
<210> 1379
<211> 545
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (46)
<223> n equals a,t,g, or c
```

```
<220>
<221> SITE
<222> (536)
<223> n equals a,t,g, or c
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<220>
<221> SITE
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<222> (544)
<223> n equals a,t,g, or c

<400> 1379
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gtctccctct tctatcacct ctctccagga tctctgctgt ctcttggatc ccatctgcct   180
agatggaaga ggatcctatc cgaagctagg ataaatgttg tcttactcct ctgctatgtt   240
ctcccagaaa aaattgatta caagttctct gctgtggttg ctgcagctcc aggaagtccc   300
cgcaatgtct cacgttgtct ttgaccagtg gtccccagta ccaggccaga gaagacaact   360
ttataatgtc atttgtgttg tgaaaattct tccactgacc caaaatggaa ccgtacaaag   420
cctatccgtg tatatggaaa agtctcatgc acctggatta actcagaaaa agtaaagtcc   480
tgaaacttca aaaaaaaaaa aaaaaaactc gagggggggc ccggtaccca attcgnccta   540
                                                                  545
tagna

<210> 1380
<211> 606
<212> DNA
<213> Homo sapiens

<400> 1380
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tgcatgctca aaaattactt ataattagga gtataagatc aaagatgttt ggaaactaat   120
gatatatatt gatttaatta gccatgtccc tattgataaa cttttgggtt gttttcagtg   180
ttttttctctt ataaataata ctgcagtgag taaaaccttg atgccttttt ctgagttctc   240
ttctcagcca ctacaaatgg aactgctgtt ccataaagtg taaacattta tgaattgaat   300
ggaaaattcc aaattgcttt ccaaagtgtc tgtacagggc tgggcaccat ggctcatgct   360
tataatctca gcactttggg aggccgaggt gggaggatcg cttgagccca ggagtttgag   420
gctgcagtga gctaagattt ttgctactgc actccagcct gggtatatca gtctgttttc   480
atgctgctga taaagacata cctgagactg ggaagaaaaa gaggtttaat tggacttaca   540
gttccagagt ctcaggcagg cctccttgtc ccagatccct tgtgaatgca ctaactctga   600
                                                                  606
ccggca

<210> 1381
<211> 1035
<212> DNA
<213> Homo sapiens

<400> 1381
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gctggtcagg atgaccaggt aaataatttt ctgaagaaga cagcaaagca aaagtgtgct   120
agatacactg aatcctgttg ccaaagaacc acaccagtga ggctgccaca cacgaaggaa   180
ggaggtctct gaagcaagat gtgccgtgtg tcccctaaac agtagctttt gttttgcctc   240
gtatgcaaga ccaatgctat caagttgaaa gagacttttt ggcagaactt cagacatcaa   300
agaggatgga tgctgtgact atctgtggtg ccaagaaggg ggatgaaaat gaatgcagat   360
gtattcactt caatagatga cagtgtcctt ggtttccagg agttctgtgt tcaacacttg   420
tatttacaat gctcaggcaa ggaggccatg ccatcaacct aatgtcatta cagcaggcag   480
gtggaaaatg agtttaaagc aatcgctttg tgccttgttt gttctctcac taattcaatc   540
taatctcaag ccccaaacag atcttccacc agttctgttc tcagggggct tcagccccta   600
gaaacaccta ccttgaattc aagctgtgtt gggacaacca aaaagaagga aaggttaaaa   660
ggaagaaaac aagggaaaga attggggaga aggagattaa ggaagaaaag caggaggccg   720
ggcgcggtgc tcacgcctgt aatcccagca ctttgggagg ccgaggcggg tggatcatga   780
ggtcaggaga tcgagaccat cctggctaac aaggtgaaac cccgtctcta ctaaaaatac   840
aaaaaattag ccgggcgcgg tggcgggcgc ctgtagtccc agctactcgg gaggctgagg   900
caggagaatg gcgtgaaccc gggaagcgga gcttgcagtg agccgagatt gcgccactgc   960
agtccgcagt ccggcctggg cgacagagcg agactccgtc tcaaaaaaaa aaaaaaaaaa 1020
                                                                 1035
aaaaaaaaaa aaaaa

<210> 1382
<211> 2414
<212> DNA

<213> Homo sapiens

<400> 1382

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ctaaacccac agctttaagt tcttccctaa aagaagcatt gcagctaacc cttgaactca      60
cagtttaaaa atacagtatt tctcttctcc acatctccat gccttcgcat caatgcttgt     120
ttttcctggt gaacactata gataatctcc tgtytgaaat gtgggacagg gtgtttcatg     180
gcagtggagc taagtttctc ctctttatag tgaactggtg acccaaatgt ccctgtcatt     240
tatagtgaac tgatgaccca aatgactccc tgtcagtaga gtcccatgtg gcccatgctt     300
cacacaagca gaaatgaacg cactgttttt aaggctagat tatcagttct agaatgatta     360
cttcaaagat gggagctacc tcctcagata ttcacactat gaaatggagg tgcttgatgt     420
gtttcacact ggcttgtttg acagtcttct atcttactgt taattcagca gtattttatt     480
gtgaaagaaa accccagtgt ttgagctcac tcaggaattg gggagagaga tggaccacca     540
ctgtggtgca tttcttaagt gttctgggag aatgtcatac ttttccttcc cagagtaaaa     600
gaaaccttkg ggagatcctg agggagactg tttctcccca agtatgatga tgtctagtca     660
agtctaagaa taccactgga catgttctat ggacatttgg gattgcagtt gctattctga     720
tttgattggt cctcagtcaa atggatcact ttgaaggaaa gctttggttg tcaccgktat     780
ataccactga gataaagtgt tagcmaagta tggttcaaat taacttatga catgaccaag     840
agcttttctc ttccaaaaga tgaattgtat tgtaaatagt ttctcaaaat attttttaact     900
ggatcatgag catggggaga gaaagtttct cagctgctaa gaatttcccc actgtttact     960
tctttcactt atggtggtat tgcatttaag attacaaaat ttaaggtttt atttgtatct    1020
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agggctgatg ggggaaaact ccctctagcc agtcagcact ctaacccagg attaaaccat    1140
cccatcaagt agtatgtgaa gtcaagtctt cgtactcttg cagaccagac attgaaatgg    1200
attcattcat atagatttct ataaatccta taagtgaaaa gatagacaac tgtccgcagt    1260
tgcttttaaa aaaggtcact ataataagta ctatatagta cagtattaat ttatagcagg    1320
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ttttggaag ctcctattga acatacccaa acatctgtaa acatgaaaaa tcttcaattt    1560
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attggttttt acccttttgc ctaaagcttt gatatcccca cttgatgttc tgtgaattca    1800
ctgtttaatc tattaagtga aataataaat agtcctggtg acaaacaatc tgttgattta    1860
gaggaaaggc cctgaaaaat acagtattgg gaaactaact ttgcatatgc tgktagctat    1920
tattyygcat catgggcttc atgggaagaa catgktgcat ttattttgtc tttattaaaa    1980
gactactagc cacaagttac tctgattata gtaactgttt tatcaaccca cttcatcttt    2040
aaaaaattaa atttacattc acaattcaaa acagtaagct gtctttcaga aaatttttga    2100
aggataaaaa catgaaggaa aaaagtggcc cgtgtaggta ggattcccta cacaggactt    2160
ttagttgtat cacctcaaga gattttgaag tttgtgatca aggtctgtat attatcccaa    2220
actttattaa gaattgtttt ctaattggtt ataacatttt tcaattaata gtttcaaaac    2280
aaattgttaa tacaactgta taaaatgaac ataattttcc tcacttgtat ttttgttatt    2340
gagcaagttt atcaaaataa attgtctact aaagaaacta aaaaaaaaa aaaaaaaaa      2400
aaaaaaactc gtag                                                      2414
```

<210> 1383
<211> 582
<212> DNA
<213> Homo sapiens

<400> 1383

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ggcacgagat ccacttccca taggctcatc acctggcaat ccccaattct ctgtcacggt      60
agttctgcct ttttaaaata tcatatacat aaatttacat tatctggtct tttgtacctg     120
gcttatttca catagaataa atgttttgaa gtttatgttg tgtgtatcaa tggtttgttt     180
cattttgttg ttgagtattc tactgtatga atataccaaa atttgtgtgt ctgttcaccg     240
attgattgac atttgggtta ttacaacttt aaagctacta taaataaacc tgctaaaaat     300
gtttacataa gagcttttgc attggtatag attgtcattt ctctggagtg aatatctaag     360
aggagaattt ctaggttata tgataagtat aaccatattg ttaagcattc tagttgatgt     420
gtagagaaag acaggatcga aagcaattaa aatgaaagaa tatttcaaaa gataaaagag     480
aatatagaat aacatggtta taaaagccag tggaagagtg attaagggat ggaaactgga     540
gtttcaatgt tagaacttca gaaattgaaa aaaaaaaaaa aa                       582
```

807

<210> 1384
<211> 1426
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (506)
<223> n equals a,t,g, or c

<400> 1384
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atcatcatca ttattaatgg gagcccatta tgtgtgctgt cttatttcat cttcacaata     120
ttcacatgaa ataagcatta tctgtacttt atgaataaga aaactgaggc tcaaagacat     180
aaatgtctta atcaagtcac ccatctatta tcagaaagaa cggggatttg aaaatgcatc     240
ttcctagaga caaaacttgt ttccattatg ccacaggatt ttactatgta ccacggcttt     300
aaaaataata actcttagga ggacttattt ataaaagact cctggtattg caggaggaaa     360
gtaaatatat tttcatgact ctgcatctaa ctctgggttc tttccttaat cccatgtgtg     420
tgtgtgtgtg tgtgtgtgtg tcttttttaa agggaaaaat acccatagat tttctcttgc     480
ttcagtgcaa cattgcagat gatccntagt gatgaccttt cccaaagtta cattgtagaa     540
ttcattggct aatatcggct gataccaccg catgaggtgc ataattaagt gatgtggtgg     600
caagaccaga ttcattatcg tagacggtca tgtgccctgc catgacattt tggtcaggga     660
cagactgcat atacagtggt gtgcccataa gattataatg gagctcagct aaaaattcct     720
attcttggtg acatcatagc cgtcataaca ccgtagtgca acacattact ttttctatgt     780
ttaggtaagt ttctatacac aaatacttac cactgttttg ccgttgccta acatattcag     840
tacagtagca tactgtacag gtttgcaaca ggctatacca caccgcctag gtatgtagta     900
ggctgtacat ctaggttcgt gtaagtaaat tgtatgatgt ttacacaatg agaaaatgtt     960
ccatttccca gttcatatcc tccttcttaa gcaatgcatg agtatctctt ctgttcttat    1020
gctttcctct tccaggaaat agatataagt tgtgtcctag caacaatttt ttgcttcaca    1080
taatatctaa agatatctaa ataaattaag attcactaat gactctagtg gctttttaatg   1140
ccatgagata ttcctactag ttctttctgt cattggttta ttttcattat gtagattaga    1200
aatgaataaa aattacttcc ttatttaca ctaatactaa taaatgcctc tgatttttag     1260
agaactgtaa tagatatatg atgtgttact ctctttgact atttgtataa ttttgttttt    1320
taaagataca tctagattaa aaactactgt tgtaagctgt tgaaatcttc catatggcca    1380
aaattctgtc actgcctata gaaattccaa aaaaaaaaa aaaaaa                    1426
```

<210> 1385
<211> 712
<212> DNA
<213> Homo sapiens

<400> 1385
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gctggaacca acaagaaaac cttaatatgg aactgcaatg atgggaattt ggggcattga      60
aagaagttgg gttggcaaca ttgcttgggt gatttccttg ctaacattgt actgtaaggt     120
gtgagggcct ttgcattaga ctctgactgg gctctgtaaa cctgagcctc attcttagaa     180
cctcttgagc cccttgatgt tgcccagtca agtccatagt gactgtaggg gctgaacttc     240
aagggccact tttgcttata gccatcacct gagagcacct ccagaatcaa aatggccttg     300
ggaagtactt gccccagaga gagtttttaaa aattattctg tcaatctgac tcaattcctt     360
gtagatagtt catttccagg catgtatttt cttggagttt gttaaaaaca atggaaaaat     420
cttatcttaa aagtacctct tgggccgggt gcggtggctc acgtctataa tcccagcact     480
ttggaaggct gaggtgggca aatcacctga ggtcaggagt gtaagaccag tctgaccaac     540
gtggtgaaac cctgtctcta caaaaataca aaaattaacc aggcatgatg gcaggtgcct     600
gtaatcccag ctacttggga ggctgagatg ggagaattgt ttgaacctgc tgcattccag     660
cctgggcaac agagtgggac tcaaaaaaaa aaaaaaaaa aaaaactcg ag                712
```

<210> 1386
<211> 1702
<212> DNA
<213> Homo sapiens
```

<400> 1386

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cgtttgtgtc gctgggcagg gttctgattc agctaaagca gcagcacacc cttctgtaca     180
aggtgaatgg aatcctcacg ctggccacct tcctttcctg ccggatcctt ctcttcccct     240
tcatgtactg gtcctatggc cgccagcagg gactaagcct gctccaagta cccttcagca     300
tcccattcta ctgcaacgtg gccaatgcct tcctcgtagc tcctcagatc tactggttct     360
gtctgctgtg caggaaggca gtccggctct ttgacactcc ccaagccaaa aaggatggct     420
aaatgctcct gggagtcagg cgcagcctca caccagctgc ctcctccact cagcattcca     480
tggaccaaat tgtgccctgg gtagcctcag actttgggta ttgataagcc gatggatttg     540
agtttttcta aagaatattc atattacctc cttcttctaa cttgccctat ttgcaaaagc     600
acttttgtag taacaactat tgggtcctgt cagacctcca cggacagcaa agtggtttta     660
atgcaagccc aaggatcctt cttaaggtct tatctcaaga gctctgggaa gtggaagcat     720
ggggtgggat cggtggacca gggtggtaag tgtctgcaca tctgcctgtc cctgtatcag     780
cggctaccca ccttccaaac cactcaggac agtacccgtg gcactgggcc cgcagaagca     840
agggatgact tggttcttgg aagtaatgtc gtcttgtgac attggcctgg gacaatcatt     900
gtgggtaggt agttattgat cgtttactag ataacccatt ggttctttgc ctcatcctct     960
catccatggg tcagagttga attcttatgt ctatagactt ccaatcagaa gtctcactgg    1020
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catatccaca tgcagagggc gagctcataa aactacaggg aagcgtgaaa tgatggcttt    1260
ggtagctgtt tactgggtaa ccccactgtg acactgtcct tttcatgtga tgtggaaacc    1320
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accgacacct gcgcccccttt ctgcaagcag gattttctgg tgccaacact cattcatcat    1560
tcccgatcaa ctaggatgaa tttaagactg tgctaccatg tgttctcaag tggtagttta    1620
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                                                                    1702
tcaaaaaaaa aaaaaaaaaa aa
```

<210> 1387
<211> 1720
<212> DNA
<213> Homo sapiens

<400> 1387

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gacctttttaa tgttactgtc ctctttctgt tctttctgtc accatcagac ttctcagctt     180
accatctcca ttttttcacct ttaacccatt ctgaactcat tgaatcatgc ttctgccacc     240
accatactac tgaaacaggt catcggtgac ccacccccgg atgagaccac ttcatcaagt     300
ggtctcatct tcattcctct tcccacttca cttcagtaac attttatata ttcacctctc     360
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gactgcattc tctacctaca gaattattat gggcattgtt tttatttatt tatatatttt     600
aaatagattt aaatgcctta aacgggatgt atacgccttt ctattaaggg cccctctttt     660
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gtgtatctaa attagcatga ccaaaactaa attcccccaa aagaactgct cttttttcttc     960
tcaactggga atattttccc cataactcta ctcgacattc taaccaaaaa ctttttgttt    1020
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ctctgtctta gaaaatcatc cactcactca catgtttgct gaagccaaaa ttttagcagt    1140
tatctttatc atttaggttc cagtcaggag acagttattt gaacagagag aattttttag    1200
aaagaattgt gaactaggta aaaagtagct aaatagataa ctgaaaaagt aaaaagaaaa    1260
cgaagatatc atggagttaa aaactggaag aagcaacaac cacctgtagg gctgggagaa    1320
caggaagaaa agattggaac aaataagact tagaaactta atgaagaggg cttgtggaac    1380
tgagctccct ggtgctggag tctcttggta gaggcagagg tggggtacgt ctgtgataaa    1440
```

```
gctggttctc caaaggctga gaaaagtgcc aactgtattt agttgctctt aaggaaagaa    1500
gtgctgctgc agggatgaga agccttgcca ggggtgacag tcacaggaac acaagcaagc    1560
ccacaggaag cagttaggga ggaagcagcc atggtgtctt ccatccaggg ccagcaggca    1620
aagctgatgc gtagtgtgca gagtccttgg tgcagcatcc caaagcacag tatagaaggg    1680
tggggttaga gatgacaaaa aaaaaaaaaa aaaactcgta                          1720
```

<210> 1388
<211> 505
<212> DNA
<213> Homo sapiens

<400> 1388
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ggcacgagca gctgtttcta tggtaatttt ttgttcattg ttatcactta tagcttactc      60
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cttttctaac cattagtcta aattgacatt taggtaaatt tgctttttaag ttgaatactt     180
aagccaatga ttcagtcatt ttgtcttttc tggggtgggt agtgcctact agacatttaa     240
ttgtgctgca ttttaatatt tcttaccatt cattataaac ttttttttttt tagacaggct     300
ctccctccgt tgcccagact ggagtgcagt ggcaccattt tggctcattg catccttaac     360
ctcttgggct caggcgatcc ccccacctta gcctcctgag tagctgggac tactggtgcg     420
tgccactgcc atgccttgct aatttttgta cctttttttt tttttttctgt agagatggga     480
ttttgccatg ttgctcgggc tggtc                                          505
```

<210> 1389
<211> 485
<212> DNA
<213> Homo sapiens

<400> 1389
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ttacatttct acatttttaa tactcacatg ggcttatgca ttaagtttaa ttgtgataaa     120
tttgtgctgt tccagtatat gcaatacact ttaatgtttt attcttgtac ataaaaatgt     180
gcaatatgga gatgtataca gtctttacta tattaggttt ataaacagtt ttaagaattt     240
catccttttg ccaaaatggt ggagtatgta attggtaaat cataaatcct gtggtgaatg     300
gtggtgtact ttaaagctgt caccatgtta tattttcttt taagacatta atttagtaat     360
tttatatttg ggaaaataaa ggttttttaat tttatttaac tggaatcact gccctgctgt     420
aattaaacat tctgtaccac atctgtatta aaaagacatt gctgaccaaa aaaaaaaaaa     480
aaaaa                                                               485
```

<210> 1390
<211> 2007
<212> DNA
<213> Homo sapiens

<400> 1390
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cggcacgagt gaactcctga cctcaagtga tgctcctgcc tcagcctcac aaagtgtggg      60
gattacaggt gtgagccacc gcacctggcc agaaaaagag aaaataattt ttattataga     120
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ataaatcatt tatgaatagt aatagacttg aattgttact ttatattaca cagttggccc     240
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cataggttat atgcaaatat gccatatgag ggactggaaa acccagggat tttggtgtcc     480
tgggggctcc tggaactaat cacctgtgga tactgaggga caactgtaat taaattgatt     540
tttggatgga tgcaactgat gttaaatttg gcgggggggga aatgttagga ttcacaataa     600
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gttgacagta tggtactaaa tagaaagtgg ctgaatgaga aatgtaaatt gcagagggca     780
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aagattgtca ttctgatact gtcagagcag atgatgatga agaaaatgaa agtcctgctg     900
aaacagatct gcaggcatgt ttcttcaatt gtgtctttga tttttattcc attgttccca     960
tacatatgca gaaattgatc ataatcatgg gtatttgtag gttattactg tttgcatgga    1020
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atttaactgt ttccatactg gtttatagaa tacttaaaac tatgttatgg ctttctttgt    1080
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aggcttacgc atgactcaaa acccataatc ttaaaaagat tgatgggttt gaccacctaa    1200
aagtttaaaa cctgtgtata agaaaaggca tcataaataa agttaagaga aatagccagc    1260
tggaaaaact gtttattata tatgggcaga ggattcatct cattacatag agcactcata    1320
tatttggaag aacagaggat aaaaagatat gagtggactg ttaatggcaa aataatacaa    1380
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ccttgataca gcaattctac ttccaggaaa ttaattttaa ggaaatagtg gggaaagtaa    1620
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taaatattca ttccctgtta ttaagtaatg atgcatccat acagtgaaaa cactacagcc    1740
atttaaaagg atgaagtaaa tctttataca ttaaaagaga aaaaagttg ctgtaactag      1800
ttaagtgtgt ctcactgcac ttgtaaggtt aataataatt atttggaaca gctcatctag    1860
tagacattga atgctgctaa agattctgca ggtcagagat ctatgtgtaa caggttaaaa    1920
gcgtagcaac aaagcagtgt acagaatata gagaaaaatt aatttaaaac attctagata    1980
                                                                      2007
cgtctttta aaaaaaaaa aaaaaa
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<210> 1391
<211> 1499
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (867)
<223> n equals a,t,g, or c

<400> 1391

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gttccatagc aggcactcag gggtgtcggc cacgaagatt attctttctc ttctctcttt    180
gccgtcttat ttcatctctc tccgttattt ggttcccctg tccttagtcc cctttctccc    240
ccaatggcat cccaagatgc acaatagtgg caagtgccca gcctgtttcc acagcctgat    300
ccccaccact gcgttggcca gtcacccaag aagcagctgg accccatcat ctggctctag    360
ggatgaccca gttccagcac ccccgcaaac ctccgtctgt cccctacct ccctcagcag     420
aggcccagcc caatgcaggc ccgtggctgg atgggagtag ctcttcccac caccctggg     480
cagggctctg cggagcttgg gagcctcacc tggaatcggc cctcatgcct cagtagagaa    540
ggagagcgag gagagaggtg atggggctcc gcgggcaccc ccgatgcaca gtctccttct    600
gggcttctga tggccacaag gccagaagac ctgcccagaa gaattcagta taacccagtt    660
cagtgaaatt ggagagaacg agggcctgcg tcttccgggc agaaggcagg gttcctgccc    720
tctggagccc ttggcctggc gcgggctgat taggacctaa atctgcctgg gtggctgggt    780
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caccttctct ctgccacgtg aggacatggg gaggaggcgg ctgcctccca cccaggagga   1080
gcccttactg gacactgggc cctggctgca ccttgacctt ggacttctag tccccagaac   1140
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gcgcttgggg agaagcagaa tttgaggagc tcctcagtgg caggctgccc tggccctgct   1260
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gcgcctatgg ggtggagtga gagtgaggaa gaaacattac ccgaggggtc actctcttca   1440
gaagacctca atgactgtag actactgaat tatttcctta aaaaaaaaa aaaaaaaa     1499
```

<210> 1392
<211> 1626
<212> DNA
<213> Homo sapiens

<400> 1392

811

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atgtggaaca ttttttcata tgtttgttgg ctccttgtat gtcttctttt gagaagtgtc   180
tgttcatgtc ttttgcccag ttttaaatgg gatttgtttt ttgcttgttc acttgttcac   240
acttttttt ttttatagag ttctggatgt tagacctttg tcagatgcat aatttgcgaa   300
catttttct attttgtagg ttgtctgttt actccactga aagtttcttt tgtagtgcag   360
aagctcttta attaggtctc acttgtcaat ttttattttt gttgcagttg cttttaagca   420
cttagtcata aattctttcc cagagccgat atctagaatg gtgtttccta ggttttcttg   480
taaaattctt atagtttgag gtcttacact taaatattta atccatcttg agttaatttt   540
tgtatatggt gaaaggtagg ggtcctttca ccatagaata aaacgttgtt tcattctttt   600
gcatatggct agccagctat ctcagcacca tttactgaat agggaatcct ttccccattg   660
cctattttt gttgactttg tcaaagaaca ggtggctgta ggtgtacagc tttatttctg   720
ggttctcaat tctgttccct tggtctgttt gtctgctttt gtaccagtac catgctgttt   780
gggttactgt agctttatag tatagtataa agtcaggtaa tgtgatgcct cagctttgtt   840
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aatagttttt tctagttctg tgaaaaatga cactggtcat ttgataggaa taacattgaa   960
tctatagatt gctttgagaa gtatagccat tttaacaata ttgattcttg taatccatga  1020
gcatggaatg ttttttccatt tgtctgtgtc atctgtgatt tctttcagca gtgtttccta  1080
gttctctttg taaagatcct tcacctcctt ggttagatgt atttctaggt actttgtttt  1140
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gtacaccaag aatattgctt ctgagaatga tcttatcctc attgggaaag atttttctgt  1500
ttttagttga aattgagatg aaatacatct tattataaat aaattttgac tcttactaat  1560
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aaaaaa                                                            1626
```

<210> 1393
<211> 2397
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (155)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1195)
<223> n equals a,t,g, or c

<400> 1393
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gatagaaaac acacagtgaa gtttaatcag gaacccaacc tccggtcctc tgctacaacc   120
acggaaacgg ctccaaactt gagggggggac ccccnaacgc ctgctttttgg cccaaagctc   180
tgccttccag ccctcctcat acccactggc cacctaggac caggaaaggg gggtagagcc   240
ctgagaattc tgggtctggg gtcaccagct cccacacctg tgctccccgg ccccacacac   300
atgatgccca ggggtgggca atccctgaca gcggtggccg gcacttggga gctcctgctc   360
agccacctgc cacggcccac cctggggggtc cggcaggagc cagggcagtg catggcagca   420
taaggccccg ctgcagatcg actgccttca gaaacaaaaa gtcccggcgc aaaggcgttc   480
ccggagtggc agcctggcct gcaccccagc tgtgctgccc ctgcagagcc ccagcagcga   540
gscacaccca ggtcagggga gggggcttgg gtaccagggg cctcactggc tcttcaccag   600
gaccctgtag agtgagaagc tgaggactgc ggccacggcg gccccgacaa cccccagcag   660
ccccccggagc cagaaggaag agggatgcag ctctgcgtgg accaaatgtg ggaaggcggc   720
catggtggcg agctgggtga agatggtggt gctgggctcg gctcgggccag cacaggagaa   780
cggcacggga gcgggtagcc ggtgcttgcg gcaaaactcg gccggtgatg ggccagacac   840
cgcgacactt cgggcaggtc ggccttggag gagacaaaga ggcagggggt ctgcccgtcc   900
atgtaatggt gcttgtagac gctggcacaa tgtgcaaagg actttgggtc actgccatca   960
```

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cccacctcac agaggatcaa gtacttctcc tgcccattga cctgcaccgt gtcgatggcg    1080
tagccgggag gctgctccct cgtgtcctgg tgccccaggc cgcggccgag aaaggcctgc    1140
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tgcgtctgtc ccttctcctg gtccagcctc ttctcacgag tgactgtgat ggcatgggcc    1260
tggtcctgct cacagagggt ggggtagccc aggtagccta ggtgtccaag gcagctccgg    1320
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aacactctct gcacaaactg gtagccaagg tggttgagct ccgtgctgca gccgggggc    1560
acgtggatca gaggggagag atagtccgca gtcagctcca gggcatcgct gtagccgaag    1620
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caggtcctga tctgagagcc tgaagatgcg cgtcagcgcc tgggcgcacg cgggcctcaa    1980
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cacacacacc acgtttgcct tgtggatctc ctcccgcagc tcctcgtccg tctgctcggc    2340
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```

<210> 1394
<211> 641
<212> DNA
<213> Homo sapiens

<400> 1394
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caaatgaaaa cattgcaaga atatcaaaga gagcagtgtt tgcgttagtg attataaact    120
gcagcatggt gctgacattg ataactgaaa gtcaactaat gagaatttga gacttctgaa    180
gtacacttag ttgctagtgt ctcccttttg gtgtcactgg aaagtttaga aagcatggtt    240
ttgttttttgc tcaggtttct cttctgtga tgcagagact ctcagctgtt cctcctctat    300
gtctacatta tgtctgaagg aaagaattta acaaaacttg aaatactgct gtttttctac    360
aatgtttgta aatatttatc ttgctgcttt tctaggtttg tcttctggat ttaaaatttg    420
gggcggctgg ggtggaattg catggtttgg gaatgggtaa ttgagctgct gctcattatg    480
gtatgtaaca gtgatttgtc tgtttaatat gtacaagaac tggaaggtca ataaaatgaa    540
agtggttgtc ttgactgggt aatagtgtta catattttgt taaaagttat acatcttttc    600
aataaaaaca ctgcatactt caaaaaaaaa aaaaaaaaa a                         641
```

<210> 1395
<211> 2163
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2118)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2136)
<223> n equals a,t,g, or c

<400> 1395
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gctcccaccc ctccggcccc cccaccgtcg cgctcctcca ggctgggcct gtggccgcgg    120
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813

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tgcttttttaa ttttcccca gctcagaatc ttgctgctcg gcccccagga gagcaacaac     180
tcaacgggaa cgatgtggaa ggtgtcagct ctgctcttcg ttttgggaag cgcgtcgctc     240
tgggtcctgg cagaaggagc cagcacaggc cagccagaag atgacactga gactacaggt     300
ttggaaggcg gcgttgccat gccaggtgcc gaagatgatg tggtgactcc aggaaccagc     360
gaagaccgct ataagtctgg cttgacaact ctggtggcaa caagtgtcaa cagtgtaaca     420
ggcattcgca tcgaggatct gccaacttca gaaagcacag tccacgcgca agaacaaagt     480
ccaagcgcca cagcctcaaa cgtggccacc agtcactcca cggagaaagt ggatggagac     540
acacagacaa cagttgagaa agatggtttg tcaacagtga ccctggttgg aatcatagtt     600
ggggtcttac tagccatcgg yttcattggt ggaatcatcg ttgtggttat gcgaaaaatg     660
tcgggaaggc cctaaagagc tgaagggtta cgccctgctg ccaacgtgct taaaaaaaga     720
ccgtttctga ctctgtgccc tgtccctgag ctcgtgggag aagatgaccc gtggaacact     780
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ccgttcacca gacttggctc ctctaaacat ttgctgttca aacatgtttt tgaatataca     900
ttctataaaa gattatttga aagacaaaat tcatagaaaa tggagcaaaa ctgtataaac     960
tgatttgtaa ctaacactgg accattggat cgatattaya tgctgtaacc atgtgtctcc    1020
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agtccttgga tccagtgcta cgtcagtaaa tagcaccagc attttgcaat tgctgatctg    1140
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taatcaacta ggaaatctaa acttggataa cacgtggtga acaactgcct ttagctggtc    1260
cagattaatc atttcaaaga catccatttt agatcacaag caggaagtcg atagtctcaa    1320
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gctggatgct taatggtgct agaggctcaa gtgtgtttga aaccaagagc cagttgtccc    1620
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taacattcac tttctgcctc tgaggaaaga tacagggaac aaaaatcaat ttgtacagtc    1740
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tcatgacata ccgcaaatat ctgtggggtc ctgttgaaaa gaacaaaata aaggagccca    1860
aggggtcatt ctgtctcagc accatccagc ctggcacttc tcttcccata tatccattgg    1920
attttttttt tttttttcct aaacaaagtt tttacactga gcagatgctc tgtcatgatg    1980
gcggttgtgc aattctggta tcctctaaat ttgtaagcat tcataaaaaa aaaaaaaaaa    2040
aactcgaggg ggggcccggw cccaattgcc ctatagggag tcgtattaca attcactgsc    2100
cgcgttttac aacgtcgnga ctgggaaaac cctggngtta cccaacttaa tcgccttgca    2160
gaa                                                                  2163
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<210> 1396
<211> 1312
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1168)
<223> n equals a,t,g, or c

<400> 1396
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cctatgttat cagattggct gatcattgta ttgcagtgct atgttcaggt aacacttatt     180
ttacttatag tggtcccaag gtgcaagagt agtgatgctg acatattatt ataacttcta     240
ttttattatt cttattgtta atcttactat gcctaattta taaattaaac ttaatcatag     300
gtatatatat ataggaaaaa catagtgtta tatagggttc aatactagcc ccagtttcag     360
ttgggggtct tggaatgtgc cccccacaga taagagggga ctatattctt atagaagaag     420
agtttgattt tttaggacgt tatttcctgt tcaaaccatt gacccactct ttgagataag     480
ttattctgaa gctttcatat aagtaaaagc aattaaattt tgccaccagc accatcctca     540
accattctga attataaagt gttaaaatta agaacaggaa gaatggaagt attcaataaa     600
aaatgaagta ttttcagttc catattgtca tcaaataagg gtgggaaagg caaaggagaa     660
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gccatattga agtcaggaga gagtgcagag caagaaagga tgggcagaaa aaaagaaaac     780
aagaaaggag tttaatgagt gagtagaatg tgctcttgtt gcattctact gccagtctaa     840
```

814

```
gccatggaat agttcactat tctgggaagt attcttaaga tcatcagtga ccttcaggtc    900
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cactctcaac caccaactct ttgtgaaacc tttttttccc tgaaagctgt gaggtcgtgc   1020
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ttttgtttttg kttttttgktt tttaagagtt gggatcttgc tctgctgcct aggctggagt   1140
gcagtggcgc aatcatagct cactgcancc tcacactyct gggcttaagt gatctacctg   1200
ccttggccty ctaagtaact gtgttcattt gacacagttt aggaactaaa gatcaggtaa   1260
aaccagccag ttcctgagct ggaattgaat ctgttcagaa tgtctgggaa ct            1312


<210> 1397
<211> 1966
<212> DNA
<213> Homo sapiens


<400> 1397
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ggccacgaga ctcggacatc tttccaggaa cagcgtgagg aggacagaag cacccaacag    180
gactgctcaa gccacctgcg aacactgctg ctaccatgcc caagagaaag gcaaaaggag    240
atgctaaagg tgataaagca aaggtgaagg atgagccaca gaggagatca gctcggttgt    300
ctgctaaacc agctcctcca aaaccagagc ccaggcctaa aaaggcctct gcaaagaagg    360
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ctgcaaaaaa ccgagatgcc tctacactcc agtcccagaa agcggaaggc actggggatg    480
ccaagtgaaa tgtacatttt tgagagctct gtacttatag tgactctact gtttgaaata    540
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ttagcacaca ggacacttcc ttgttgtctt ttgtggaaag ggcaagtacc actaatagggg    660
tgtatctcag aaactgaatt gaaataaggg aaaataggat tttctgtcct ggttttttgaa    720
gattgttctt gattcccttg attcccagga gagattctct gacattcacg tgtcagccac    780
tttggcacgg aagccttaca gtgtggggaa ccaaaacttc gtgtctcctc tttccccgat    840
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ttggatttgt attgaattta tagattaatc tggtaaacca tgtcatcttt acaatgttgt   1860
cttccaatac atgaatatgg tacagctctt catttactta ggcctttgaa atatctttca   1920
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<210> 1398
<211> 1726
<212> DNA
<213> Homo sapiens


<400> 1398
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catgactccc accaaagatc cctgtctctg attcaccaaa cagcttcaac cctgaaacca    180
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815

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gatttttctg acactccaaa tgttaccata tacttacatc agttccctcc aaatgtcact    600
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gacaaattct ctaacttatc tagaacacaa acttaattcc tcatcttttc caggtccctg    780
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<210> 1399
<211> 2006
<212> DNA
<213> Homo sapiens

<400> 1399
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gtatatgaca ttaagaagca agcgtggttt acttacaatg acctggaggt atcaaaaatc    180
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tggggaagac tacccgtcag scctcgtgag gaacaaactc ctgggttggc agcatgcact    360
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tgtgtatgtg tgtatacaca cacacagaca cacacacaca cacgggat gaatggagcc     660
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ggagaagaaa tgaaggtgtc aaagagtcca ttcacctgag aaatgtgtga agacatactt    780
atcagttggc ttttagcttt tatgttcctt gagtagtttc actcaagtct gtaacctttt    840
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816

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acatttaaaa acccaccatc acatgagaga atcacttgaa cccaggaggc agaggttgca      1920
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taaaaaaaaa aaaaaaaaaa ctcgag                                           2006


<210> 1400
<211> 1175
<212> DNA
<213> Homo sapiens

<400> 1400
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tggcttcctc gctgctgact gccgagggg ccctggcctg gatccatgct gggcagaagc        180
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aatacacaga gcctggaccc agacgagacc tccccacccc cccatctttg tccccaccag       300
gacaaagagc tcttgccagt cttcccactg ggccatggtg ccagctgtcc ccctagttct       360
cctgccaggg accccaaggc tgggaccacc ccgccagcct gatgccccag cacccactct       420
gcggcaactt ttctgccacg gcagccccct ctagtggaca ttggagccct gccgcggagg       480
cggggggctgg aggcttgtgg agcccttccc agggtctcct agaccccggt ggagcagaag       540
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ctcctcccct tcctcgggag gctccccaga ccctggcatg ggatgggctg ggatcttctc       960
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<210> 1401
<211> 1402
<212> DNA
<213> Homo sapiens

<400> 1401
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ccatgagttg ggggtcgggt gggggaggga aagggaggga tgaccttccc agggagaaac       180
ccacgacctg tcctgtcttt gatcgcctct ttgacatttt tgccaaaata ccactagtgg       240
aaagtcaggc tagctgtgct ggtattggaa tagcagcctc acactggcgt ctggactgtt       300
ctgtagattc atgcaagtgg agctgtctgt ctctaattta acttattgct agataatagg       360
gttttcagat gaaaagaaaa cttaaagagg aatggccctc attcagtaag ttctgtggtt       420
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tctgtctcgg ctctgcatgt tttccagggt gtagcctaca gacatggaac agtgtaaatc       540
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aattattaat cctcttgaaa agaaaacgtg aaacgccaca aaaatagaga aaattcaggt       960
ctgtatgtca tggatcgtgt tggtattttc agagaacatc ccgcttctga agctgctgca      1020
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gcctcgtgct ggcggacgca gctgggtgca gaagctgtgg ggtcggagag gcgtttggag      1140
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aaaaggaaga gctatatcct taaccattct gtccaatttc gggagccttg tcagtgtgtc      1260
agttttcct ccccgaagac actccttccc caagtaattg taggaagata aaaaaactgt       1320
taccagataa caaacactga actcctattt gaccagaact ttttcctctc aaaaaaaaaa      1380
aaaacaaaa aaaaaaaaa aa                                                1402


817
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<210> 1402
<211> 1221
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1220)
<223> n equals a,t,g, or c

<400> 1402
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gatagatggc cttttccaca gcccctggaa cgtgcttagg atgcatacca gggtacaagc     180
ttaggaagtg tgggcaccca ccccagccca tggacctgtg tgctccctgc gttgagcctg     240
agatgccatg cttctctcta ctctctctac cactgtggga tcccttggtg attttggttt     300
tctgttagta aacttctgtg tttgggatct cgttgtctag acaaataacc accctcatcc     360
ctgccatctg cccagtgctt cacaccctcg ctacacacag tgtggtcctc ctgtcaggtg     420
tcagcatcac tggagaatat tagaaatgca gagtcttagg ccctatccca gatctaatag     480
cttcaaatga atcttcattt ttataagatc ccgagagacc ctgtgcccac tgaagtttga     540
gaaatgctcc caacttatta ctgccactcc acagctgtca cctcctcagc tccacccaac     600
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cagagagtaa gagggactca gatcgagatc tgctgccttc cacccagggt ccctgaaata     720
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gcaatcgacc tgcccaggcc tcctgagacr tgcaatttam cawwactgtg ggtcacctca     840
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gctatggaga agggctaatt gatcttgaca tgggctaaga aacaacatya cacctgcggc    1020
aatgactgca agcttttcta gtcccaagag ggaaaggsaa aattctgctc ccaacaatga    1080
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<210> 1403
<211> 942
<212> DNA
<213> Homo sapiens

<400> 1403
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tgttcttccc ctacctacac caggactggg aagtgcagta ccaacaggac accccggtgg     180
cccccccgctt tgacgtcaat gccccggacc tctacattcc agcaatggct ttcatcacct     240
acgtttttggt ggctggtctt gcgctgggga cccaggatag gttctcccca gacctcctgg     300
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gctactacct ggtgctgggc tggtgctgcg tagccatctt tgtgttcatg atccggacgc     540
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<210> 1404
<211> 2103
<212> DNA
<213> Homo sapiens
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818

<220>
<221> SITE
<222> (456)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (457)
<223> n equals a,t,g, or c

<400> 1404
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acagcagcta tagccacaat ctgaggaatg gcagacaaga aacagcagag taggcctcaa    180
ggagtcactg aagaacccag ggctcctctt tttagctcag agccatttag ctgaaattga    240
tgagtggatg gtctttaagt cattctccct tgattggtca gtggcctgtc acagataact    300
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cagacacaac accatgtggt ctggaggtcc cagcccccac cctaaaaagg ttatccctga   1920
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<210> 1405
<211> 1255
<212> DNA
<213> Homo sapiens

<400> 1405
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cttcttttgg cacctgtaag ttccggtagt ggccatctta cattctcatg tcctgctgga    300
agtgcctagt tgcctgcaaa gccagctaag gcttattatt tcaaaagaag attatttaaa    360
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819

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agcttggagg caggatgggt tgctgagtga agtcgccgct cactttggga ttcttatgga    480
ctgtgagtta gtcttccctc tacacggagt cacaggaagg gtataaatgc atgttcctga    540
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ggttggctgt tagctttgct ttatgatttc atgtttcttt taaaggttgt tttgcatgtt   1200
gaatattaaa tttttttttt ctgtgtmaaa aaaaaaaaaa aaaaaattct cggcg         1255
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<210> 1406
<211> 1642
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1369)
<223> n equals a,t,g, or c

<400> 1406
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cagcccacct gtgattatgg atatggaact tggaactctg ggacaaatag aggctacgag    240
ggctatggct atggctatgg ctatggccag gataacacca ccaactatgg gtatggtatg    300
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catttggaga cagacatgat gcaaggaggc gtgtacggct caggtggaga aaggtatgac    480
tcttatgagt cctgcgactc gagggccgtc ctgagtgagc gcgacctgta ccggtcaggc    540
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taccgcgacc agttccgcat gcgtggcaac gacaccttcg gtcccagggc acagggctgg    660
gcccgggatg cccggagcgg ccggccaatg gcctcaggct atgggcgcat gtgggaagac    720
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tagcaaagcc acccgcacgg actgctcgga caacagcgac tcagacaatg atgagggcac   1140
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cacatagccg ggccttgtca tttaaagcca ttgtaaataa ctgggctact ctgggccacc   1500
ctgcctatag gatagccctg ctctgtctat ggagcaagca gctgttttac tatataccgt   1560
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<210> 1407
<211> 1621
<212> DNA
<213> Homo sapiens

<400> 1407

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gactttcttt tcctttttgg tttgtagcct atgatgttgg tttacttgga ataaaatcta   180
gtaagaattc atagaatatt gaagctaaaa ttttacttag acatccctgt cctagctctt   240
tattttctga taaagaaatt gagacataga acatggcaca caactcaaca tctaggttta   300
gcaaatgttt actggaaacc tgtaaggagc ctggtactgt atttgcagag gcatttggga   360
cacagagctg tagttcccga cctggagaaa cttagccata ctttctgact ttcatttcat   420
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ttataactta aaaaaattcg acactaatct tagaaataac tgctgtttac cactaaggaa   600
agatagttat tctccatgtt ataaatggct tcaatatact ttagggttct gggtttcccc   660
cagcattggc atctgaaaaa gaaagatgtc ttagagcagc aggagaagta tgggatacat   720
gagctgttca ttcttgcctg acatgaactg gcctgtagag gatgagctgg gcatttggga   780
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catagagtct taccaacgag agaggcactc aaagaatgtg aaggttcagt tgattatttt   900
ttaacttggg cttggctgta gaacataact cttcttcgta tgactttttc atttcctgga   960
attctcctaa caacaaaaca agaggcttag tatccaaaag gaatggagta aacactgcag  1020
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atcttaaatg gcacgatagt ttgaatgccc acacttctgc atgtggtctt tctcttggtt  1140
catttttag gtatcccagt ggttcttaaa tataatatgt aaagggatta ctgtagtgca  1200
aggttgtata tacatatctg tatgtgaatt ttagaagagt ttaaaaggat tttcttaatg  1260
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cagttgtcta ccaatattat ttattctcaa aggacatagt ggttcttttt cctaagagaa  1560
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a                                                                  1621
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<210> 1408
<211> 1978
<212> DNA
<213> Homo sapiens

<400> 1408

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caaatctaat gttgaaatag aataatagat ccagaaatta attctaaagt cttatttatg   180
gttctttaat gtgtccttga tattagcttg caattagctc catcaagtga tagtatccaa   240
cgtaaaatgg gcttagcaat ttcttgcttc tcatgctgct tttatatctc tcttcttttca   300
cattcttgga gtccccaaca acagggcaga ggctgaaggg cacagatctt ttgtgtcgta   360
tggcttggcc tccattgaag taggtgaggg tgaccatccc tggtacggaa agacaggtcc   420
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ctcaacttca gatttacacc ctgatgcaca gagactcata tcctcgattc atgaactctg   1680
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aatttagagg ttgtagcatc ttctgctgga gtaatactca ggctattcta ataacagatg   1860
attccttcaa cagactgcta tatattcacc atgtaaactg cagccacctt tagtgatact   1920
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<210> 1409
<211> 932
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (929)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (932)
<223> n equals a,t,g, or c

<400> 1409
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aataatgctt tgttttcttt ggaacatgat aatcttacta gtggcttctt cggcctattc    180
tggttgtgac cttgcccttc ctggaacttc ggcgttatga ctgtwcttaa ctgctgaagr    240
atggctgrat gtctggaaat ggraaaatct gtsctgtgga tgaaatctta ttaatagatg    300
tggragmcac taattagamc accacaactt aaaagagtgt ggatgaatgc ttaatgtctc    360
tttaagtcat ggagatggtg ttctgggaaa gaggtgagtg tagtgggggt atgatggcat    420
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agtaacacat gtagataagt tacatttaat gttctgttct ttggtgtctt gatatttatt    660
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taaaagatgc ttgaggctgg gcacggtggc tcaacgcctg taatcccaac actttgggag    780
gccaaggcgg ttggatcatt tgtggccagg agttcgagac catcctggcc aacatggtga    840
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<210> 1410
<211> 3052
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2994)
<223> n equals a,t,g, or c

<400> 1410
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cagggtccgc tctgccattc ctgaactggt ccctcgtccc cgtgactctg gcatcaggga    180
agcgaactgt taggcgagag gaggaggcag ccagaaccat atccccttct tcctcggggc    240
gggggccggg ccaggccggc tgagccgggg gagggctccg ggagggagtg cctggccagg    300
ccggcctgtc tgccgcgatg gatgacagta aggtggttgg aggcaaagta aagaagcccg    360
gtaaacgtgg tcggaagcca gccaaaattg acttgaaagc aaaacttgag aggagccggc    420
agagtgcaag agaatgccga gcccgaaaaa agctgagata tcagtatttg gaagagttgg    480
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822

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tatccagtcg agaaagagct atatgtgccc tcagagagga actggaaatg tacaagcagt    540
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aagagcagaa caaatctcag cagaactcaa gcaggcatac caaggctggg aagacagatg    660
ctaatagcaa ttcctggtga agattatata aagatgagtc agtgattgaa gccaatattc    720
tgattcccat ggaagatgga tgggcaagag tgtacttctt ggctccattt actacctact    780
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<210> 1411
<211> 1280
<212> DNA
<213> Homo sapiens

<400> 1411
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gccaaggtag gggttagctt ttgttctctt tgtagtttag attgtatctc ttgccttgtt    180
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823

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ccatgtgaag acagaatgag atgaccatgc ataaaccagg aaatggactc tcactggaca     1020
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tggaacgtga gaaatgaatg tttgttaagg cagtcagtca gtctatggtg tattttttct     1140
agtagcctga actgactgaa agaaaatcat gaacttatca ttctaacttc aaggacatta     1200
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aaaaaaaaaa aaaaaaaaaa                                                1280


<210> 1412
<211> 3620
<212> DNA
<213> Homo sapiens

<400> 1412
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ccagaaagat ggcagcttct gccctattgt tatgtgtggt gactttaatt ctgttcctgg      180
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tggaaatttc cttttttgta gacagtagga caaggaatta tatgcatttt tactaagtag     2220
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ttaaattgga aaacaataat agtcttggac taagtctttg tactaaagca tttgctataa     2340
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gtctagtaaa aattgtaatt gaatatgttt aaatatttaa tttctcattt tgggggggttt     2460
ttattttttt attttttaga tggtgtctca cgctatcgcc caggctggag tgcagtggcg     2520
cgaactcggc tcactgcaac ctccgcctcc tgggttcaag caattctcct tcctcagcct     2580
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824

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cccaagtagc tgggattaca ggcatgcacc accatgccca gctaattttt gtattttttag    2640
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aatgtgagct tctcacaggt ttttaaagct ccactaaaag taattatcca cttgtcttta    3240
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gagaggcgtc aagtcatttg cactttgtac ctgtaagtta ggtaataaac tattatactc    3600
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gtaaaaaaaa aaaaaaaaaa
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<210> 1413
<211> 1896
<212> DNA
<213> Homo sapiens

<400> 1413
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gctcttgaag gtattaaaaa tgcactggct tcaaaaatgc tgtatgaatt tattctggaa    180
aggagaatga ctttaactga tagcattgaa cgctgcctga aaaaaggtaa gagtgatgag    240
caacgtgcag ctgcagcgtt agcatctgtt ctttgtattc agctgggccc tggaattgaa    300
agtgaagaga tttttgaaaac tcttggacca atcctaaaga aaatcatttg tgatgggtca    360
gctagtatgc aggctaggca aacttgtgca acttgctttg gtgtttgctg ttttattgcc    420
acagatgaca ttactgaact atactcaact ctggaatgtt tggaaaatat cttcactaaa    480
tcctatctca aagagaaaga cactactgtt atttgcagca ctcctaatac agtgcttcat    540
atcagctctc ttcttgcatg gacactactg ctgaccatat gcccaatcaa tgaagtgaag    600
aaaaagcttg agatgcattt ccataagctt ccaagcctcc tctcttgtga tgatgtaaac    660
atgagaatag ctgctggtga atctttggca cttctctttg aattggccag aggaatagag    720
agtgactttt tttatgaaga catggagtcc ttgacgcaga tgcttagggc cttggcaaca    780
gatggaaata aacaccgggc caaagtggac aagagaaagc agcggtcagt tttcagagat    840
gtcctgaggc agtggaggaa cgggattttc caacagaaac cattaaattt ggtcctgaac    900
gcatgtatat tgattgctgg gtaaaaaaac acacctatga caccttaag gaagttcttg    960
gatcaggggat gcagtaccac ttgcagtcaa atgaattcct tcgaaatgtt tttgaacttg   1020
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tttatataac tctgcagcct tcaaagctcg aaccaaagct agaagcaaat gtcgagataa   1140
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ctatttttt ttctatttca atgtatttaa actctagaca cagttttat cttggattaa    1260
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aactggtgag ttctgattat taaatattct ctgtaaatca gtaaacatgt ataaagtatt   1380
tgtaatgttt ggtcataatt tatttatgaa gacagcaaaa gactgatttc atgatgggga   1440
aaacaattag ccaaagttta atttcttaca ctgtggttgt caagaatact gatttactat   1500
aatgatatat acatgcaaga tatttaactt aatatcttag acaagagttc tgggtacaat   1560
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cttaaaagcc attcagttca gctattggga gttcatgatg aattagcata tgccagaaag   1740
gttgctaacc ttaacatctg agagcagtaa cactgatttt atctgctgta tgagactttg   1800
tgcattttac tttgaaataa agatttttt cccactgaaa aaaaaaaaaa aaaaaaaaaa   1860
                                                                     1896
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa
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<210> 1414
<211> 1361
<212> DNA

825

<213> Homo sapiens

<400> 1414
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taaggtggaa tcactgggac tatggtaact gtgtttactc atttgagcag ccgccagcct     180
gctttcccaa gtgtctgcac catctcacgt cccttcctgc agccttggga gttctgattt     240
cgccacatct ttgccatcac ttgttttttct ctgacttttt gtttccagcc catgttgggt     300
gtaaagcagt gtcttgtggt tttcatttgc attttcatga tgactgataa tgttgaacat     360
cttttttttgt ctttcttggc gatctgtatt tcttctttgg agaaatgtct attccgattc     420
ttgcccactt ttagttggat tattgtcttt ttgttgttga tttatgagtt ctttacatca     480
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atgtcatttc actttcttga tggtgtcctt tgaggcacaa aacttttaag ttttacgaa     600
gtccaattta ttttcttttt gtcacttggg cttttgctgt catatgtaag aatcttttgc     660
caaatccaag gttatgaaaa agaaaaacctt caaaagtttt tttattttag ctcttttatt     720
taagagctaa aataaaaatt ttaatagctg catgtggtgt gaagtaggga tcccagttcg     780
cccttttgcg tgtatctgtt cgttggccca gcaccgtttg ttgaaggctg ctctttcctc     840
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agaaccctca gttccactgc accgatgcgt gtgtctgtcc ttgcgccact cccacactgt     960
cctgttacca tcgcattgta agtcttaaaa ctgggaatgt aagtcctttg acttttttct    1020
aatccaatac tatgaacaaa atagatggca gatgaaattg aaaatttcct agaaaggtgc    1080
aaactactca aactgattca acaagaaata gacaatgtga atagatatat aacaagtgaa    1140
gaggttgaat tagtaatcca aaaacaccca taaagaaaag ccaaggacca gagagcttcc    1200
cagctaaatt ctaccaagca tttaaagaat taaaaccaat tctcacaaac tctttcaaaa    1260
gactaggaga gtgggaaatg cttctcaatt cattttatga gaccaatatt actctgatac    1320
cataatcaga caaagacatt gccaaaaaaa aaaaaaaaa a                         1361
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<210> 1415
<211> 643
<212> DNA
<213> Homo sapiens

<400> 1415
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cctgcagggc agtccggagg tggggcaggg tgggaaagga ggcctcctaa cttccaatcc     120
aggacgctct ccatgttgtc tgaggccctt gtgatcccat ctcttggctt cttcgtctcc     180
tctctctgtt ctgaccagtg gcctctttcg gcccagccca gctcatggct ctcggcggcc     240
ttcccaggcc ccgcttttga cttttggcag cctcttcagg cacagaactt gatctccagt     300
cggcctttgc aggcccggcc tcctgcctct cgaaggcctg cacgggcccg gcctcggcct     360
cggcctcggc ctcacagcgg actctccacg cccagctagc tctcgcctca ctgcggcctc     420
cccagtccaa agctcctgcc tttcggccac ttcggcaggt ccagctcctg cctgccagtg     480
gcctctttag gcccagctca ttctcacgtc ggccattcca ggccccgtgt ttcccttccg     540
gcagcctctt ggcctctaat ttgtttatct tttgtgtata aatcccaaaa tattgaattt     600
tggaatattt ccaccattat gtaaaaaaaa aaaaaaaaaa aaa                       643
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<210> 1416
<211> 1323
<212> DNA
<213> Homo sapiens

<400> 1416
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cagctcctgt tttcttggtt ctgtgaacac tcgagtctga gccagcccct caggaattgc     120
ctcaaaagag aaaaacaaaa aaaagtcctc cttcccaagg cctgctactc caaggtttgg     180
ctccatccct tgcctttggg tcctgcctat ttccccactc ctggtctctt atctttgggg     240
ccaccagtgg ggagtcaccc gggccccaat ccctctaagg cgctaagttg aaggaggcct     300
tcccagagtg actattggtg ccaaagtccc agttcctgtt ggacttgggg taaaaacagg     360
agatggtgag tgggtgtaag gcccaaatgc ccagagaagt taactcgaac ccatgggacc     420
tgtcccagcc tgtcagtccc tgatgagtgt aacttccttc ccctgggggc ctggccyttc     480
tctccaaccc agtggccatg ctttctcacc cagccttgtg cccggcctgc atttctgtat     540
atattgctgt gtattgtgtg tatgtatgta ttcctggaca agtgtgttca tctgcagccc     600
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826

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ttgcctgagg ataaggttta ggattgggta aagatcagaa taccagggcc agctaaggca      660
acgactccct ccccaaaccc ttgggacctc agccagtccc aaggctgccc tgacaatcag      720
gcaggctccc caccgtgagg ccaagcctcc tctgccactg ccagcatggc ccaagggagg      780
cttggccttg ggcttgccag cctcagctct gccctgacaa gggtcttgta tccagggcag      840
aggcctgagg tgacccaggc ttgctttgtg ctgatgcca gcaggcttgg ttctagtggg      900
caccactggt gggcaacctc cataactggc ccttaggccc taccttccta cacagctagg      960
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tcacatgggc atcagagaat ttatggctct gtatccaata aaaaagatgg tgaaactggw     1260
maaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaactc     1320
gag                                                                   1323

<210> 1417
<211> 2083
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1781)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2057)
<223> n equals a,t,g, or c

<400> 1417
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gctaagtgca ctggtcattg gttgttcttt cagtgccctt cagacagccc ttgccctggt      180
ggtcttgtgc cctccctgtc tgtttggtgc ctctttata aattagtgat gacttcagga      240
aatggtcctg gatttcaaat agctattcct ggagacattc taattctgtg gtttaaacct      300
taaaacaaac aaaccaaagt aattccctgg atattggtgg ctactggtgt gaagagcatg      360
gtgcggcgcc tgttacttgg atgagctttg atcaaagaat ggcatcaaat gataacagac      420
attggaggta taagtgatta caaggagaat catagatcta aataaaaatg gaatggtggt      480
taatactta attgatcgag atgatacagc aatattttta ttcatatatc agtacaatat      540
ttaactttta aaggaagtga tattcatctt agcagaggtc tcttagcacc atatttgcaa      600
cattggatgt tatccattga gccttgtttt ggggaggaaa aaagacacca actttcttga      660
gtaaattgtt ctctgaaggt gttttacaca ggaatacaaa tttgcctgaa ctcaaaaggg      720
tcttgtttac agtactttaa tcttgttttt cacttcataa gccctctgta aactgaaata      780
cagagctaca ggcaaacctc attttattgc acttagcttt attgctcttt gaagatactc      840
tgktttttttt tttttattca aattacagat ttgtggtaac cctgcctcaa acaagtctgt      900
tggtgccatg tttccaataa caggtgctca ctttttgtct ctgtgtcaca ttttagtcat      960
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tggcaamcct tatcaataag ttttgtgtgk tccgattgct ycatgaaacc agctgttccc     1140
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tcacttttaaa taaaattcta gaaaggatta aacttggtga gaaaggcatg ttgaaagcca     1320
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ttccttaagc cgaagccaga gcaaggctct aactctcttc aattctctga aagctgagac     1560
aggtgaggga gctgcagcca aaaagctgga agctagctga gggtggttta tgaggtttaa     1620
gaaaagaagc tatctccgta acataaaagt actagacgaa gcagcaagtg ctgatgtaga     1680
agctgcagtg agttatccag aagatctagc tgggataatt gataaagcta rctacactaa     1740
acaacacatt ttcactgtaa accaarkagc catctyggaa naaagatgct gtctaggact     1800
ttcttagcta gagagtacga ggcatcgcct tttcttaaag cttgaaagga caagctgacc     1860
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827

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cttggtagga gctaatgcag ctagtgacac taaattgaag ttagtgctca ttttcccttc   1920
tcaaaatcct acggcccttc agaattatcc ttaaatctac tctgcctgtg ctctaggaat   1980
ggaactacaa aggctagata acagcacatc tgctgacagc atgatttact gactatttta   2040
agcccactat taagacntac tgcttagagg caaaaaaaaa aaa                     2083
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<210> 1418
<211> 917
<212> DNA
<213> Homo sapiens

<400> 1418
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accattttca tgtattactt catttttctg tttttcagtt atgttctctg ttttcgtata    180
tttttggaag ctagttctaa gtcatgtttt gtaggaaata agcaatctta aatacatgca    240
taggggattt ctttcttctg aggatcctta atttcttcta ttttttaagat tcaaattgaa    300
tgattaatca gtaacagttt atgttttaaa taaaagtctt taaaatgtta aatatcagcc    360
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cctttaagac agggatttca gactcaagaa ccaggcagct acctatttaa atgagtcaag    720
tgggccctaa tgtaagacaa tgtgatgggt aaggattgat tctgagggaa caggagcagg    780
catgccctct ctaacagagg ccgtcagttc tgctgtacct gaaatgtggg cattgttgct    840
ggcgattcca cacttacatc taaaatttcc tgatttttta agaatgacaa taaccaattt    900
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<210> 1419
<211> 1014
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (820)
<223> n equals a,t,g, or c

<400> 1419
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tttttaaatc catataaata aagcatttat tggatttata ctgaggttga attaaagaag    180
tgtaagttta ttttttagcat cgtgagaagt gtctcactta aggtagtttt taatctggtt    240
gtgtttgcaa tgaaacaata ttagacagtt ttataattga tttctttctt tttcctacca    300
tttcatcagc aagtcccttc agctctttca aaataaaccc tgaatctgat cattgtggtc    360
tgaatcacta ttatattttg ccagaactgc tacaatagcc tccaaattct ttttttcctct    420
tttcttacac tcaattaatg aaaattttac cttacccaag taaaatcagc tatgcccagt    480
gatctttaa agacmaatca gattaacatt cacctgctga aaacccttca gtgaatttct    540
gtctcttcta gaataawwtc taaagtcttt attgtggcct ccaatgctct atctagtctg    600
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ttttctctga aaaaatagag agccatttta gggttttgaa caaaggactg atatcttcca    900
cttgccattt aaaaggatca ttctggctgt tgcattaaga atgactatag aggctgggag    960
tggtggctca cacctgtagt cccagcactt tgggaggcca aggcgggcag atca         1014
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<210> 1420
<211> 1720
<212> DNA
<213> Homo sapiens

828

<400> 1420
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ccacgcgtcc gaaactttgt gctggaatca tgataactgc atctcacaat ccaaagcagg    60
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ggatttctca agctattgaa gaaaatctag aaccgtggcc tcaagcttgg gacgattctt   180
taattgatag cagtccactt ctccacaatc cgagtgcttc catcaataat gactactttg   240
aagaccttaa aaagtactgt ttccacagga gcgtgaacag ggagacaaag gtgaagtttg   300
tgcacacctc tgtccatggg gtgggtcata gctttgtgca gtcagctttc aaggcttttg   360
accttgttcc tcctgaggct gttcctgaac agaaagatcc ggatcctgag tttccaacag   420
tgaaataccc gaatcccgaa gaggggaaag gtgtcttgac tttgtctttt gctttggctg   480
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cagaaaagca agacagtggt gaatggaggg tgttttcagg caatgagttg ggggccctcc   600
tgggctggtg gctttttaca tcttggaaag agaagaacca ggatcgcagt gctctcaaag   660
acacgtacat gttgtccagc accgtctcct ccaaaatctt gcgggccatt gccttaaagg   720
aaggttttca ttttgaggaa acattaactg gctttaagtg gatgggaaac agagccaaac   780
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gctgcccttt tgttctggac aaagatggag tcagtgccgc tgtcataagt gcagagttgg   900
ctagcttcct agcaaccaag aatttgtctt tgtctcagca actaaaggcc atttatgtgg   960
agtatggcta ccatattact aaagcttcct attttatctg ccatgatcaa gaaaccatta  1020
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gcaaatttga aatttctgcc attagggacc ttacaactgg ctatgatgat agccaacctg  1140
ataaaaaagc tgttcttccc actagtaaaa gcagccaaat gatcaccttc acctttgcta  1200
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tggtcagtgc tattgaagaa cattttttcc agccacagaa gtacaatctg cagccaaaag  1380
cagactaaaa tagtccagcc ttgggtatac ttgcatttac ctacaattaa gctgggttta  1440
acttgttaag caatattttt aagggccaaa tgattcaaaa catcacaggt atttatgtgt  1500
tttacaaaga cctacattcc tcattgtttc atgtttgacc tttaaggtga aaaaagaaaa  1560
tggccaaacc caacaaacta acattcctac taaaaagttg agcttggaca tattttgaat  1620
ttttgtaagt gaagattttt aaactgacta acttaaaaaa atagattgta attgatgtgc  1680
cttaatttgc ataaatcata aatgtaaaaa aaaaaaaaaa                        1720
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<210> 1421
<211> 1730
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (455)
<223> n equals a,t,g, or c

<400> 1421
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ggctcagact gcatgcaaag actaggatgg ggctcttgct ctggctcagt gttgggcata   120
cttcccctca gaaggccccc gccaaagagc ttagattttg gcttgggaaa aacattaccc   180
ctcttcagta accctgaagc tctgtatttg gtatttggga ttcaggtagg tcagctgctc   240
atgttgmctg gcccaagtgt gtaagaacaa acagtaatgc cagtcatttt cccactaaga   300
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aggtttctca gtgagaaaga gtcctaagac agtgaagtgg aacgargcct aaaaatcat    840
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cattggacta gagagagact tcagaccaag atatcatgtt tatgttcttt tagctagaat   960
tgtgttaagg caatgactat ctcctacagc ttagaagttc tgaagtacat ggccaggagc  1020
ggtggctcam acctgcaatc ccmgcacttt gggaggccga rgcgggtgga tcacccgagc  1080
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                                     829
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tcaggagttt gagaccagcc tgggcaagat ggtgaaaccc tgtctctact aaaactgtga    1140
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ggcacaagaa tcacttgagc ctgggaggca gaggttacag tgagccaaga tggtgccagt    1260
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aaccccatct ctacaaaaaa tacaaaaatt agctgggtct ggtgacgtgt gcctgtggtc    1560
ccagctactt gggagactga ggtaggaggg tcacgtgggc ccaggagatt gagacttcag    1620
tgagccatga ttacaccact gcacttcagc ctgggcagca gagtaagacc ctgtctcaaa    1680
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<210> 1422
<211> 2018
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (672)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1609)
<223> n equals a,t,g, or c

<400> 1422
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cgggcatgtg gcgggtgagg agcccccaaa taactcttga actggaaaat aactctttag    120
ctatatactg gcagaatatt tgaacaactc tagcaagaaa tgtcagttta gggatgcctc    180
ctctaaatgg gggcttagaa tataacattt tgcaggaagt cctttctgat acatagctga    240
ctagatgaag gaccagatta acaagttcat gagttgtaaa tataaaagtt gtgtaccacg    300
ataaaaaaga aaagaagta tggctgcact gttgatggct ggtcaaacag cccccaagaa     360
tcctggggtg actccaatac tgccaccttt tctctgtggg tgcagttgcc tgcggatgtg    420
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gcgtcactgc attcctatct gattaatgtg accttagtgt tgtagataca ctgtgtcact    540
ttcatcctcc ctcctcccca caaaagatgc cacgagaact cgtgaactgt gataagcaat    600
gaacagaata actgttgaag aagcacctca tgaacctccc cagagaaacg ggatggagga    660
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ctgcatttaa attaaataaa gtttgcacct ctagggagtg ctgacctgaa aataagaacc    1080
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aaaaaaaatt agaaaagcat taccatttac tttccaaggg gcaagagatt ctctacaata    1200
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gggttgcggg gcttggacta agtgaggagc attgtgtgac tccgcggtgg atttccatgc    1620
ccaccaatcg cctggactac agtgaggagc attgtgtgac tccgcggtgg atttccatgc    1620
accgaatgga ctcagtttct aaactcacat cctaacgtat cctggctttt cacagaatac    1740
tggagacatg actgcatgca tgatcacggt tcttgttgtg aagctgccac catgttacgc    1800
ttaacagctg cataaatatt ataaagaaat agggttttct tgacacttag atttaacctt    1860
aatgcatctg cccagctgat ggtatcagac gtgctgctgt tcatttcttt ttcatggtaa    1920
cagtaatgta taaagtgccg atgatgtaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa       1980
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gggcggcc

<210> 1423
<211> 1020
<212> DNA
<213> Homo sapiens

<400> 1423
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tgttacttat ctttactttc tctgccttgg tcctctcata cccactcctg attttaggtg     120
attgggtgga aatggccatt gaacatcata ctctactaac aaagaccatt tgagagttag     180
attaatctct ttcccgtttc aacaacagga agaagcccca caaatcaagt atttcccttg     240
ttctatacct tgtcattttg ttgctactcc caccagccaa agagggagga aagtttcttg     300
gtataattaa aatgttatag gctgggtcgg ggggctcat gcctgtcatc ccagcacttt      360
gggaggctaa gacgggagga tcgcttgagg ctaggagttc aagaccaggc tgggcaacat     420
agtgagaccc atctctacaa aaaaaaaag atagccaggc atgatggcat ccatctgtag      480
tcccagctac ttgggaggct gaggcaggag gatcacttga gcccgagggt ttcaggctgc     540
aggaagctat gatcatgcca ctacactcca gcctgggcaa tagagcaaga ctgtctctct     600
aaaaaccaaa aattgttata gaatatagag ttgaataact tttctggaat gagaaagctc     660
tcattttaga tatccattca ttcattcatt caatagtgtg ctggatgcca rgaatttaat     720
ggtgargaaa atagacatga tctctgcctt ctgargctca aratcctccc tctattttta     780
aaaatcaggt ttattgaagt ataattgatg tacagtaaaa wttactgttt ttagtggaaa     840
cttctgtggg ttttggcaaa tgtgtaacca acacaattaa gatcyagaac atcctgtctc     900
tcccctccca attttcttgt gctcctttgg agtcaacaac tctcccccaa ccccatggcc     960
tccatgactt tttcaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagggcggcc    1020
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<210> 1424
<211> 957
<212> DNA
<213> Homo sapiens

<400> 1424
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cccacgcgtc cggagactga gtggcttaaa caaaagacat ttattttctc acagtcctgg      60
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tggcttggag atggccctgg ttggtcttct gagtgcaggt gtccctggtg tctctttgtg     180
tgtccagatt ttctcttata aggacactgg tgagattgga tgaggggccc cctgacggcc     240
tcatcttaat gtcatcacct ctcttatctc catatccatt cacatacggg ccattgcgag     300
ctaccgggga ttaggggttc aacacataaa ttgggggtgg gggggtgcag ctcagcccat     360
aaacatgccc cctctggctc gctctcccag ggcatccatc gtagcactta gaaaaatgat     420
cacttctttt ttggctttgt ggtggcgtgt gtgtgtgtgt atttgtatat acacacatat     480
atatataaat acacagacac acatatatac aaacacacgc attcattttc gtccacagtt     540
cctggctcat aactcccaca gcccttgtta cactctttg ttacaacatt gggtgtgtca      600
ggcctcagga gacaatcact ctaacctcct gcccttcctt ttacctgccc aagacaggac     660
tctaatcttc cctacctttc tgatggtggg tcataaaact cattccagag acggtcccac     720
cccatatcct gctagaagga atgctgctgt catgaagctt ccataaaaac caaggggact     780
ggattcagag agcttccaga taactgaaca tacagaggtt ctagaagggt ggtgcgccca     840
gggagggcac aggaagctcc atgcccttcc ttcatacctc accctatgca tctctttatc     900
tgtatctttt ataatatcct ttataataaa ccagtaaatg taaaaaaaaa aaaaaaa       957
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<210> 1425
<211> 1034
<212> DNA
<213> Homo sapiens

<400> 1425
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cccacgcgtc cgtttttattt aatttatact taagtttgaa tagccacaca tggctagtgg      60
ctatcatact ggtcaacatg ggctatctaa ttctgatgta cagtctctgc atcatcattc     120
cattttctaa agtgggtttc tcccacagca gttgttaaaa caaggatttg gatacaaaga     180
gattatttaa gaggtgtcc tagacagcag gagagggatt gaggaggtga gatggagaag      240
gtgaatacta gtaaaagact acattgatat gctgtaggca cttgaggttt ctgtttgttt     300
gtttgtttgt ttttttggaa accttcgaga gacttatgga aaacactgta taattgtttc     360
```

```
attgaggagc acggaactga tcatgtttat tcaccaactc tcatgccttt ttggttgaag    420
gatgctccta ggggcattca cacctgctct gaactccttc ttcatctcca gcctgcctcc    480
cttatgggcc atttcatgcc actgtaccta gataaagcct tagggccaag agattcaggt    540
gcttgaggct gggtctatcc ttctgagctg caaataactt ccagggtgga tcaagggaat    600
gtggggtcag gatagattat attgcctctc atttacaacc aaccatatta gctcatatta    660
gtgtttttatc tggaatagga ggagaagcat ttgagactgt tagaaaaaag gttctgctat    720
ttaaaaaaaa agttttgaaa ctgtagctct aaactacatt cctacctgtt ttcctgacca    780
cctcaattac taacttgtat cgtgttccat attatttcta gcacagcatg gattctctaa    840
cattcttgca gtctgggccc tgcaaggtag ctgtaaaaat gctgccctgg gactttctca    900
gtggagacat aagaagactc aagcattcca gaaagtgttt gtttggttgg cttttattga    960
tgtatataaa aagattagag acagcaagag aagaaaatca gagagaacct atacttggtt   1020
aaaaaaaaaa aaaa                                                     1034

<210> 1426
<211> 1150
<212> DNA
<213> Homo sapiens

<400> 1426
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ggtgtgatga gagactgaga tgtgaattgc tcagtagaga gttggcggtg gcgtatccca    120
gagtgtactt agaaacatga aaacttcttt gaaagggagc tgatcacttt tggaaaagat    180
ttacagttct taggaatgca aatatttgtt tcttttcctt ttcatctaaa acatttacca    240
gataaagttg agtccagaga caactaacta ataagagaat aattttaata tgttttttcca    300
tttttggtgtc aacattgcat ggattttttt tcttgttcca agactggctt tttccagtgg    360
aaacttagca gttaaaatta atttgttcca aatgaaatat tgcatctgaa attaggctgg    420
aattgcagta gacgttcctg gttcttgcaa accagaggac attcttgaag ctgtgtggtc    480
ccaggctctc ccctctctgg tttcctgtgt tccctccctg cagcctcaga ctcgccctcc    540
agggctccac tgtgctttttc caaactctca tcctttcctc ccaggcgtcc tgtgcagcac    600
gccactgcct ctcacttctc acatccacag ctcctgcttg gtcagtgttc ctagttgagt    660
gtcagaaatt gaacaaccca attagctggt atttcatttg taccaaccta tgaatggagg    720
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tgtatgtagc gacaacaaat acaagaataa ggagagttta acaacattct caaagttggt    960
ggaaaagaaa aagaatcaat gaaaacatca ccctaaacca gctagtgctt tctgtttaca   1020
gggatcagac cccttcccac ttaaaaaaaa aaaaacaaa aaaaaaaaaa aaaaaaaaaa   1080
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1140
aaaaaaaaaa                                                         1150

<210> 1427
<211> 1761
<212> DNA
<213> Homo sapiens

<400> 1427
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cagtagtggt ggtagctaga tcagccttgg agagagagag cccatcattt caggccatca    180
cgactaatcc attcatttat gggccctttg taaggattga gatggctgag gacaggggct    240
gacaggcatt cattagacca gtcatcctgt ccatatgctt attcagtgct tcttctgcca    300
cacgtgctct ctggtggggct ctagtgtgag acacaaagat caacacatta tgtgcccatt    360
cttatagctc cagccacatg cctcttcctc agacatgctt ggtttcaatc ctctagtgtt    420
gttcccttga ggcccttgac caagcaacca agccattctc caccacctag aagtctgtgt    480
atattcttac ttttggccgc ttctctccag acacaaagca gatgaccact ggacttgaat    540
tggcacccag agttattttg ggtgtgtctt tagtgcagca ccagtccatc tttttagctc    600
acgccagcat atcatgctag cctaatcctt ataaagccct tttcctgctc cttttctatt    660
ctgtcaactg tctgtggaga aatccccaag gggccatagg tattatgtct ggaattggtt    720
ctctccgagg ggttcttggt ctcgctgact tcaagaatga agccatggac cctcgcagtg    780
agtgttgcag ttcttaaaga tggtgtgtcc ggagtttgtg ttttcagatg ttcagatgtg    840
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832

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acagaccttc acagtgagca ttacagctct taaaggtggt gcgtccagag ttgtttgttc      960
ctcccggtgg gtttgtggtc tcactggctt caggagtgaa gctgcagacc tttgcagtga     1020
gtgttacagc tcataaaggt agtgtggacc caaagagtga gcagcagcaa gatttattgt     1080
gaagagtgat agaaaaaagc ttccacagcg tggaagggga cctgagaagg ttgccgccac     1140
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ccattttaca gggtgctgat tgccccattt tacagagtgc tgattggtcc gtttttacag     1260
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gggtcctcag tagaagttgt tagttgagct catttggggt tccatttgta agaccatctg     1680
tagcttgatg gcctcaattc tagaggaaac aaatttgaca aggagattaa aaatacaggg     1740
                                                                      1761
tccaaaggca aaaaaaaaaa a
```

<210> 1428
<211> 616
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (610)
<223> n equals a,t,g, or c

<400> 1428
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caccactgca ctccagcctg ggcagcagag tgagaccgtg tcccaaaaaa gagaaggaga      180
aacagagatc atgtggaaaa agttattttt tatttatttta cttagttttc agtttggttt     240
gagactcgtg ttttaaacca gagggcatgg ttactgaggg ataacatcaa tagaactcct      300
ataattgagg ggataattat caaggtatta gatgattcac tggctattac aaagaacaca      360
gaaattatga aacctggttc tgtaacttat agtttttcat attatttta taccatggat       420
aactcttcta tgtgtattca taggtgtaag attactggca gtgtcatatg aaacaacata      480
ttacattttt taagcctgga aagcatctag tatggctgtg cacgtagtga tgacattgac      540
ttttttact taaagaagag ctaccacttc aaataagaaa aaaaaaaaa aaaaaaaaaa        600
                                                                      616
aaaaaaaan aaaaaa
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<210> 1429
<211> 573
<212> DNA
<213> Homo sapiens

<400> 1429
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gagagttccc tttttctccac attcttgcca gcatttgtta ttgcctgtct tttggataaa     120
agccatttga actagggtga gatgacatct tattgtagtt ttgatttgca tttctctgat     180
gataattatg ttgagcactg atatggtttg gatctgtgtc cccaccaaat ctcatgttga     240
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agtttcatac tgtcctcttg gtgctgttct tgtgatagtg agttctcatg agatttggtt     360
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gatgccttac tccctctttg ctttctgcca tgattggcag tttcttgagg cctctccaga     480
agcagaagct gctgtgcttc ctgtacagcc tacaaaactg taagccaatt aaaactcttt     540
                                                                      573
tctttataaa aaaaaaaaaa aaagggcggc cgc
```

<210> 1430
<211> 1384
<212> DNA
<213> Homo sapiens

833

<400> 1430

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tccaatatga  acttctggca  ttcttgttat  cttctcagga  actgcactgt  ttgcttcttg    180
tgttcaattt  ttttttttt  tccagggatg  aggatgtatc  tctcctcctg  aaactttcac    240
tctaaaatat  gcccccaaat  actgacattt  tcaagcttgt  gctttttac   ttgatatctg    300
attttttta   aattttatt   taatagggag  aaggtcatga  cttatggaat  ttactctaag    360
gatagggatc  tgagcaggtt  cctgagtact  tgaaaggctt  tatttacctc  ttacactttt    420
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aaagctttg   tccaatttt   tctgagacca  aagctattct  ttcttccact  gacgcatgct    960
atctctacta  attatatagc  cacggtatcc  tttttcttta  aaaatgtagg  aaaaaatggc   1020
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cttgaggtca  ggagtttgag  accagcctgg  ccaacatggt  gatacccac   ctctactaaa   1140
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aagattgcac  cactgcactc  cagcctgggc  aacagagtga  gactccgtct  caaaaaaaaa   1320
aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa   1380
aaaa                                                                     1384
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<210> 1431
<211> 706
<212> DNA
<213> Homo sapiens

<400> 1431

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tgaagctcac  cctaggtact  gcaggcagtt  tatttcccca  agcattgtac  attttgcttg    180
acttcatatg  ggtaaatttt  attgatggct  ctcattacat  ttagttgtgg  ggtgatgtca    240
ccttcgtagc  tcattttaag  tctttagacc  accatcagtc  ataattttca  aagaagctaa    300
ttttgtctat  taaatggaac  agaaacttcc  tcactctgaa  ttttggataa  gtttgtcatt    360
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aggtagaacc  agctgcaggc  agtggggact  tggggactag  aacaggcagg  gaggtggaga    480
gctattctgg  tgggatgtcc  tagggggctga  tgaaagtgag  ccttgacagc  agctttgttc    540
taaaggagct  taaagagaaa  gcagtggccg  ggcgcagtgg  ctcacgcctg  taatcccagc    600
actttgggag  gccgaggcgg  gtggatcacg  aggtcaggag  atcgagacta  tcctggctaa    660
tgtggtgaaa  ccccgtctct  actaaaaata  caaaaaaaaa  aaaaaa                     706
```

<210> 1432
<211> 419
<212> DNA
<213> Homo sapiens

<400> 1432

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ccacgcgtcc  ggaagaggag  gtttgtgttg  ccttcagatg  actgttgatt  taattgacag     60
gcagctttc   ttcattgtgt  gcttttgct   tttgctcaca  aaagtgcatt  cactattcta    120
tagtatgttg  aaacttttaa  atggaaacgg  cttttcatta  acaaaggaag  cattttcttc    180
ccccttcca   tgccttagct  ttctccgcta  agtcttggct  tcttcagcag  ctgtacctcc    240
accagaaatg  acaaaaggtg  caattgtgct  aggagatggc  gatgaagata  tgccagtgga    300
gttttgtgtg  tgggctgctg  gggactgttt  tccttctgtg  tttggttttg  ttttattttt    360
gttattccag  aaagttgaga  gcacatctaa  aaaccaaaaa  aaaaaaaaaa  aaaaaaaa      419
```

<210> 1433
<211> 1025

<212> DNA
<213> Homo sapiens

<400> 1433
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gccaagcttc aaacatagat ctcctgactc cattcatatg accctataaa ctgtctcaaa      60
acaaaaagat aaattaatat aaatatttat tgaatatgtc tttgtagaga aagcataata     120
agcataaagg gcaatgcgtt aacctttatc acaagcaacc ctattggaat gtgtcaactt     180
atcagaatga atcaggccag aatatcaagt ataaatgaag cctgtagtta actgaaagtt     240
gcatatcaat caggcactcc agtttctctc ctcaaactct gaatattcaa tgaataagat     300
aaagaaatgg ctaatttgat tttacctttc attttttga cctaattcta aggtgactac       360
tcactcctca agatttaact aatgttgctt tattttatc cctctgggga gacagaagag       420
atgattggga aacacatgtt tgaagtttgt aagttctgct gctttcaacc ccacagatgt     480
ctcttactgc ccacttggss cctkgtgatt aagcaactag atttggagcc agtcaggctt     540
ttgtttagac atttaactt tttcttgctt tccttgcaaa ctcctcagcc ttcagactgg      600
ttggaaagta aatgtacaat cttacataaa ttttcaggta atagcatttc agcttttcc      660
ccargatttt ttgcttggga ggagacagat tagactggat tcggagtctt gatttgcaa      720
aggtaacaaa agacatgttt ttttataaga cttttcatca taagtttatt ttattcaaca     780
gaagcaaaat ctaatataat ggaaaaaata aagatctgtg ataaatctga tctgtgtkga     840
taaacacaat tagaaagatt taaagattaa gtattgaaac aaactaccaa aatattttaa     900
tactgatttg taaaaatttc agtacatttt cttcttgc ttaattctac tgggtcctgt       960
ttttcatcaa aacattctat catgttagta tacaatagcc aaaaaaaaa aaaagggcg       1020
gccgc                                                                 1025
```

<210> 1434
<211> 1390
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1301)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1308)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1327)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1347)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1355)
<223> n equals a,t,g, or c

<400> 1434
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gttgaggtga gtcagtttct gatgcagttg ggctccaccg catgctaggt tccagcccac      60
ttatgctcat ttgggctacc acatttgtaa gatctagcat tgcttgctct ctgtctgctc     120
ttttttcccc aaggaatacc tttctgtaac tctcatctct ccaaagtcct ggaaatctac     180
ctcgatgaag gatgaagaga aagaagacgg gaatcacatc aggcatttag aacatagccc     240
ataattaacc actcattttg cccttctggc atgctgcact cacccaattt gtcacaaaga     300
gagcagtacg ggttggtgat ggcactggtg atttaaatga aaaatggctc tttcttactt     360
attctaagaa gccaagttga ttttttttta tatatgttac cttccagacc ctgcagatgg     420
```

```
agaaggccca gagacattaa gctcagcact ctctaaagga gcaacagttt acagcccttc    480
cagatacagc taccaggtga gatgagaaat tgctggtctc tagccatagg agtgtgttct    540
gggtcccaaa ttgtcctggt catcctttgc cattgagatg ctgtctttgc atatagtttc    600
agcagccttg graaataagt catcatctgc ttgtcctcag gtaataaatt atgccagaag    660
atgaatacgg tgatcaaaga cagacatttt actgcctttg gtttccyaaa argawtacat    720
ggttaaaaga tgaagaaaaa agaatgtagg gtattataaa tgttcaccag ccatttaagg    780
gacttgttcg cgtccttatt cgtttcctcc caactttgtc tagctcctgc agtgtgatag    840
tcctcggaca gaatcacaaa gcctccttca gcagagttcc tcccccttca gaggacatcc    900
tacacagtct ccaggataca gttatcgaac tactgcactg agacctggaa accccccctc    960
tcacggttct tcagaatcat ccctctcttc cacgtcctat tccagccccg cccaccctgt   1020
gtccacagac tcgttggccc catttacggg gacaccaggg tattttagca gccagccaca   1080
ttctggaaac agcactggca gcaatcttcc aaggaggagc tgcccttcta gtgstgctag   1140
ccctamcctg cagggaccct cagactcgcc aacctcagat tcagtttctc agtccagcac   1200
aggaactctg agttccacct cctttctcag aactctaggt cgtcattggc atcagactta   1260
cggactatca gtctgccagt gctgggcagt agctgttaca ngcctcangg tatctgcggt   1320
tccaatnaca gactaccaca cgtggantgg gtggnacata ccgattcagc atgaaggtag   1380
agtagactaa                                                         1390
```

<210> 1435
<211> 783
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> n equals a,t,g, or c

<400> 1435
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gactcactat aggnaaactg gtacgctgca ggtaccggtc cggaattccc gggtcgaacc     60
accgtccgcg gacgcgtggg ttttaagttg tcgtcttgcc tctgtgctct tgaagttttg    120
agccctttgc atttggcagt gtccaggcat tcaggcctgg agcccgtgta gtgccagtgc    180
ctccctccac gctcttggcc tggttgacct cacctaaacc ctccaaaaag cagatggtca    240
gactctcttc ccttcaaact cttctctgcc ctgactcaca cctgggccat ttcatccagt    300
gagactgagg gaggagcgag ggagtccatg tttcccctcc atgacgccgg gacaggaagc    360
tagactcagt ctcttccata tggccaggaa ggggagtacc tgactgccca tcttggtttt    420
gggagagaga aaaaccagtg ctcagtctgg gaaatgaggt tttgggggat tgtgataaaa    480
tagaggacag gactctgcag gtcaaggaca gaggtgcatc ctgagggcgc actgcagtca    540
gggccaagtg gctcactctt tgcagcttta gcagcacctt ggatatagtt gctgctccgt    600
aaacgtgttg attgacagag gtgcaggtaa aaacctcaga acagttgggc ttaaggatgc    660
tacaaaaaaa gctctgggat gggatttaat tttttttttt tttaactgtt gttatcagcc    720
tggccaacac ggtgaaatcc catctctact aaaaatacaa aaaaaaaaa aaagggcggc    780
cgc                                                                 783
```

<210> 1436
<211> 909
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (909)
<223> n equals a,t,g, or c

<400> 1436
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ggctggggtt tgccattttg tgtctttttt agtgttcttc caaattaaat tttcaagatc     60
aaatatggga ctcattgtcc tgtttatgga gctttttttc ttttggttga ctattctttt    120
gtttcctaca gtcttcaaca actgttagtg cttacaatgg atacatcatg catcttaatt    180
gataggatgg atatgataat acctttttg gtccaaggtc ccgctcatta aaaaaaatag    240
tttataaagc tgaaaagttt ttatttctat ttttttgtaaa atgatttttca tgataggatt    300
ttatataaag gggaagggtt ttttgtatca tttttataac atttttgaaa tgagtactta    360
```

836

```
ttctctttca tcatctattt tagactcaca gttttatgag taatgcagta aaggtcatgt    420
ggcacattag taaaatatgt tctgaacaca gaaactattc tccttatcac aaattaaatt    480
ttatgttaag tttgaagagc actggcctgg ggtatacttt gctgtgaaaa gatcattttg    540
gtcacttaaa ttacaataga aatatttgtg ttaagaaaat taagtaaaaa ttaggctggg    600
cacagtggct cgcacctgta attccaggac tttgggaggc ctaggcaggt ggatcacctg    660
aggtcaggag ttcgagaccg gcccgaccaa cacggtgaaa ccctgtctgt actaaaaata    720
caaaaattat ccaggcgtag tggcaggagc ctgtaatccc agctccttgg gaggctgagg    780
caggagaatc gcttgaaccc gggaggcgga ggttgcagtg agccgagact gtgccactgt    840
accccagcct gggtgacaag agtgaaactc tgtctcaaaa aaaaaaaaaa aaaaaaaag    900
ggcggccgn                                                          909
```

<210> 1437
<211> 766
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (758)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (759)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (760)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (761)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (762)
<223> n equals a,t,g, or c

<400> 1437
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tggcttgccc tggcattggc gtttgtcctt cttgtacaca caaaagcatc atgctttgta    120
cactgttcgt ttttgtttcg ttcactgtct tcacggtaaa gatgaactaa gagccactga    180
gaaggctgtt tatgggaacc agaaggttgt ttgcttccct taagttcgct cttcctggca    240
cctggtgccc ttgcagccca tggggaatgt gatggtcacg ttttctcgtc tctcctgcct    300
catcccatca gccagttcac tgctgtgcct gaactcctgt acagggtgtc tggtgcatgt    360
ccacataaca aaaagatggt actgatcatt gagtttatct ccaaaaattt ttttcaattt    420
gattgtagaa aatacatttt taggcggggc atgatggctc atacctgtaa tcccggcatt    480
tggggggccg aggcgggcgg atcacctgag gtcaggagtt ccttacagcc tggccggcgt    540
ggtgaagccc cgtctctgct aaagatacag agactagcca agcgtggtgg catacgcctg    600
taattccagc tactcgggag gctgaggcag gagaatcgct tgggcctggg aggcggaggt    660
tgcagtgagc agagattgca tcattgcact gcagcctggg cgataagagt gaaactccgt    720
ctctaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaannn nnaaaa                   766
```

<210> 1438
<211> 712
<212> DNA
<213> Homo sapiens

837

<400> 1438
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ccacgcgtcc gggcctccac cacaagaaat tggctccaaa cctattccca ttacatcatc      60
acccactaat gtcattacac cagaatgaaa tctgctttga ggcttgtatt gttgttttcc     120
ttccattтct ttcccctcat catttccttt agaaggaaaa gggaaggaaa aaaaaagaaa     180
aaaatcaĝag acctgtaaac atttaagagt gaattggaca tccccacagg ctaaacctag     240
agttgtcagc tttcattcca ttctgctgtg atagagtgtt ctgcccagta tgtatccaca     300
tggagcctgg aaagtaacaa gtctggtcat gtgacaactg gctttggtgc tttgctttca     360
gcccctcaga attagttcct aatggctcac atagctccct gccagcatcc cgtcactggc     420
acgttaaacc ttttcaaata attcctcaga atagagattc ttaggagagc actaaatttc     480
tccattcttt gtgtttaatt aaactgttct tgcattttaa tatttgccag ataagcgctt     540
aagacattac gatacaggtt gagtatcctt aatctgaaaa tctgaaatcc gaaacttttt     600
gaccctgaca tgacgctcaa aggaaatgct cattttcgat tttggatttc agatttggga     660
tgctcaacca gtaagtataa tggcaaactt attccaaaaa aaaaaaaaaa aa            712
```

<210> 1439
<211> 680
<212> DNA
<213> Homo sapiens

<400> 1439
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cctactttgc cagtacgatc tgttcctctc tctctctcgc tccaaaagac taatctgcac      60
actctgttac agcacttgtc taattgtgct gtagcgttta tttacatgtt tgtttctcct     120
ctagccagtg agcacctctc aagcagaatt atcttccttg tttctctggc accctaaata     180
tttgttgaat taatagtcct tctcttcttt tgtaattttg ctttctgtaa tagaagctta     240
attttaagta tagttatatc agtaatcaaa atgaatcaca cactgagaaa tcaatgtgga     300
tgccctttaa gggttctgtt attttttttta ttgccattga gtaaaataag atactctgtg     360
ataaagtata ttagcattaa agtgttcaaa tctgatcttt attagtaggc ctcaagtgaa     420
tccttgctga catttaaggt ttatgacatt tccttcacgt tcgttcttga ctggaaggca     480
taaatggctg acagtaaaga gcaattaata attttccaag taaaacattt tcagggacat     540
ctgccttttat tgctccccag atgagagtac agcctgtttc ttatgtgttc caaagatgat     600
ttccctatca gctttttggt cagttaacca aaaaaaaaaa aaaaaaaaaa agaaaagaaa     660
aaaaaaaaaa aagggcggcc                                                680
```

<210> 1440
<211> 1004
<212> DNA
<213> Homo sapiens

<400> 1440
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gttaaggaag ataagctcag gaaaatgtat ttttaatgtg aaatgtcaaa aggacttagg     120
aaagaaagtc atgtttтctt cttgctgttc agtaatctag tcattaccaa acaatgttat     180
caatgcataa catataaaca tttcataatt cattttcatt tctagaggaa actagtgagt     240
aaaaacaata tcttcaggta gcagtgaaag gaagcagaga tcatggccgt ttggatttga     300
gtgaattctt tcaacacaaa tcaatgattt tatagacata tataggtttt tgtcagggtt     360
ccttagcttt tgcatctcaa aatctatttt tgctagggaa ctgtataata gctcatctgt     420
cttaccctcc ttgtctcaga gcccaggctt ctgtgccttt tccaatctga aaagcctcct     480
ccttgtctct gtcctтttga gcctcatgta actttttaaa ggcccacttt aaattccacc     540
actctataaa aagcttctcc aactattcta cctttcaatg gctctcagtt tcctccataa     600
tactttggac cttttagctg atcctgactc tcttgcacta cagtgtaaag gttctgtatt     660
tatgggctgc atactggcat gatgcttctc agttatgtat gatatcatag tcgcttttтc     720
aggacaaaac tgtgtcacag tgttacagca aaatctataa cacagtgtcg gcatgtaaat     780
tcagctcagt gaatgcttat taaacattaa cgtaatcctt gttgctttct ttattcaacc     840
ctacagtgaa attttctggg tgcttggagt aactaaaata tatttgcaga tatttaatttt     900
caacttttac acattaaaca agtagaaaac catgtcttca aaaacatatt ctttaaaagt     960
gattgtttag ggcaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa                    1004
```

<210> 1441
<211> 1305
<212> DNA
<213> Homo sapiens
```

838

<220>
<221> SITE
<222> (329)
<223> n equals a,t,g, or c

<400> 1441
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tggcaggcag agcttgttct gctccccacc ctcccttttc ccatagtaac catttatagg      120
acatctcact gttgtctact ctgtgttgcc tctgcttccc tgcctggtag atctaggaat      180
cttaggattt cttagtttta gctggtgatc cgtatctttt tcttaattcc attgtaactt      240
cagctttct tattgcttgt aggaaggctg tttccattga atacaaacaa aataaaagct       300
tttattctta atcttagaga taggatgtnt gtatttaaaa ataattgtgc tgtcaaaatt      360
ctgtcaagtt ggctttacc acattagttt tttttaatgt ggtttatatg accctgragt       420
accttgtctt ctcactgtta aattctcaac tgagttgtcc ctatttaaag tgtgagactg      480
tgccagtttg attttaaaat attgcaagtg cgttatggca agataaaact gcaaagaaag      540
aaccttcatg tccctttgat tataaatgct tttggcactt gtttctactt tttcctaatg      600
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aagaaaatag cattttttggc tgggtgtggt ggctcacgta atcccagcac tttgggaggc     960
cgaggcaggc agatcacttg aggtcaggag tgaggcaggc agatcacttg agatcaggag     1020
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ctggcgtagt ggtgcatgcc tgtaatccta gctactcagg agactgaggc aggagaatca     1140
cttgaacttg ggaaggggag attgcagtga gctgagattg tgccactgca ctccagccta     1200
ggcaacagag tgagactctg tttcaaaaaa aaaaaaaaag ggcggccgct ctagaggatc     1260
caagcttacc gtacgccgtg catgcgacgt catagctctt ctata                    1305

<210> 1442
<211> 813
<212> DNA
<213> Homo sapiens

<400> 1442
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actagtaaga gacttaaatc caggggacct caggaggtaa tacaaaagaa ttttgtatta      120
cggaattgtt tacctagaat ttgaactcgg gagagaatcc ctgtgtagga gtatatttct      180
gcaaagaaag tgcttaaaga aatggttctt ccttcaatct gtttctttga tttgtatcag      240
attagggaag gggaagctat ttgttggact tttcattttg gtaaatctg aatgagtatt       300
gagaatggct cttgagacag tagtgcactt tatattgctt tccttactgg tttttatgta      360
tgatttatta ataggcaaaa atctcattat ggtgagctta atgacaaatc agtttgtttt      420
aaacacattt tattaaaata catttagttt aaaaagtaaa tttccaaact accagctgaa      480
tacaactgtc cagattcttg caaggaaaac caaatgctag agaaggccag gcgcgatggc      540
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gccggagggg aggcatgtgc ctgtagtccc agctactcgg gaggctacag cagggggatc      720
gcatgggcct gggaggcgga ggttgtagtt agccaagatg acaccattgc attccagcct      780
gggtgacagg agtgaaatcc tgtctcaaaa aaa                                   813

<210> 1443
<211> 1694
<212> DNA
<213> Homo sapiens

<400> 1443
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tagccttgtt ggtagtattt tatatattcc taaatactat tgtaaaatac tccctcaata      120
aatcctgcat gcctttaaaa gtccctctca aaataatctg tttattcggc aggtaattgc      180
caatgtgttt tttggtggga atctttcatc ggttttccac attgttgtaa cagtgatggt      240

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catcactgta gccacgcttg tgtcattgct gattgatgcc tcgggatagt tctagaactc    300
aatgtgagta cgtgcaaaga tttaccccctt cactctaaaa ttctctttaa aagataatga    360
ttacatttaa cataagatgt attttcctta acaaaagtgt cacttttgaa gtgggaatca    420
aaatatgttt gtaatagtaa atatttcaat gatgattctg tgcactttgt gggactatat    480
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tgttggcctc tagtggataa ggccagggat atacatccca caatgtgcag gtctctcaca    600
caaaaaatta tctgatccaa aatgtcaatt gtgctgaggt tgagaaaccc tggtttagag    660
tactttgcat atctcattta ctataacaca taaatgttac taaaaatagc tataaattaa    720
gtggatttgg actttgctga ataataatat tctagtgaaa tttatgagaa atatgaaagg    780
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ttctccagat ctttcttta tagtctgcac tgccatcaac caaatagaag tcctcataat    900
atcacagttg aattaatccc agctctgttt caactatcat gtatttaagt tctgctttca    960
gtttatcggc attttcctac cagagcaagt ataaattccg ttgcttctac cttcttgtct   1020
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attttttggc ctgtgaataa gccatatcaa ttctttccat tattctttgt cctatctgct   1140
ttttatttcc gataatgatt attttctttt catttctgtc caaatttac aaaaactta   1200
agatccagtg caacttctaa ttcctttatt cacattcact gatcatatat ttattgagta   1260
attactatgt gccacacaat agaatataag gatgaatgca ataagaaagg acctgtgcat   1320
tctcacaaat aaacataaaa gttcaactgc aatataggtg atgaagacag aggaggccag   1380
gaacggtggc tcacgctgtg atctcagcat ttttggaggc caaggtggat ggattgcttg   1440
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agccgggttt ggtggcatgt gcctgtggtc ccggctactt gagaggctga ggtgagagga   1560
ttgcttgagc ccgggaggta gaggtttcag tgagctagat gcaccactgc actccacctg   1620
ggcaacagag tgagacccgg tctcaaaaaa aaaaaaaaaa aaaaaaaaa aaaaaaaaaa   1680
aaaaaaaaaa aaaa                                                       1694
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<210> 1444
<211> 865
<212> DNA
<213> Homo sapiens

<400> 1444

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ggcacgaggt gaggtgtgcc ttttaccttc tgccatgatt gtgaagcctc cccaccacat     60
ggaacggtga cagattgact gggatcccct cgcacatcct caacagctcc ccatcagacc    120
ggcagattaa ccagctggcc cagaggctgg ccctgagtg ggagcccatg gtgctgtctc    180
tgggactgtc ccagacggat atctaccgct gtaaggccaa ccacccccac aacgtgcagt    240
cgcaggtggt ggaggccttc atccgttggc ggcagcgctt cgggaagcag gccaccttcc    300
agagcctgca caacgggctg cgggctgtgg aggtggaccc ctcgctgctc ctgcacatgt    360
tggagtgatg gtgcctccag caaccgctgg ggagtgtgtc cctgagtcat gtgggctgaa    420
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tcttcagatg gaaggagaaa acagggtttc cactagacat tacttgaaag gccagattac    540
tcagcagatc tcccatgttg gctcaacaat tctttgtttt taattgcttg aagattgcat    600
tgttgtaatt gttcagtttt taaatgtgta atggcatttt aatagactag taaatcacag    660
tggttcaaaa tatatatcca tatatatata tatccatata tatatctcat gtcatcacat    720
tacaggcagg tgtctcatat gttaaacatt tacctgaatg ttgtctgagg actgaactgt    780
ggactttact attcataatg ataaaataat aaaatgcgaa ttactattta taatgtgcct    840
cactcatgag aaaaaaaaaa aaaaa                                          865
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<210> 1445
<211> 337
<212> DNA
<213> Homo sapiens

<400> 1445

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ggcacgagcc agctttaaaa atataaatat aattctttc attttagatg gaaatcattt     60
atgtcacatt actcataaat gtcgtggtgg tgcatgcctg taattcttgg agatctctca    120
ggcagatgtc acccaagtat tctacataat atgatttcca tctaaaatga aaagaattat    180
atttatattt ttaaagctgg tatactgctt ttgcaagtta ttttttttt aaagcaaagg    240
tattttaaag gacaagtaac aagggacaga gtaactatta aattaattat cttctttaa    300
agtgcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa                             337
```

<210> 1446
<211> 1777
<212> DNA
<213> Homo sapiens

<400> 1446
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ggcacgagac  tccatggatt  ttgatgacac  gtggcaccct  gccacccacc  cttctggggc    60
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ccttgacctg  ctgctggctt  tcaatgttgg  tattgaagtg  caaggccgat  tactgcattt   180
cgccaaggag  gccaatgaca  tgccaaagag  attccatccc  ccttccgtgg  taggaacgtt   240
gggtagtgct  gctgctgcat  ccaagttttt  aggacttagc  tcgacaaagt  gccgagaagc   300
tctggccatt  gctgtttccc  atgctggggc  acccatggcc  aatgctgcca  cccagaccaa   360
gcccctccac  attggcaatg  ctgccaagca  tgggatagaa  gctgcatttt  tggcaatgtt   420
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caactattcc  ccaaaagtcc  ttccaagcat  agcttcctac  agttggctgc  tggaccagca   540
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tgcatctgtg  agaaagcacc  ttgtaccaga  gagagccctg  cttccaactg  actacattaa   660
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acacacacac  aaaaatgagt  ttgtaagcat  tcacaagggt  gaaattcaac  tcacctgtga  1440
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agcatgttac  cattagccct  ctgcctcagt  ttccctattt  gtcaagccga  agtaaaaagc  1740
agtctggaaa  aatcgcaaaa  aaaaaaaaaa  aaaaaaa                              1777
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<210> 1447
<211> 1940
<212> DNA
<213> Homo sapiens

<400> 1447
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catccgcggc  gcgggagacg  agccggccgt  cccgggccgg  ggggacccgc  ccgccatggc    60
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taatgaagga  gaaatcatca  caatcacaaa  tccggatgta  ggtggaggat  ggctggaagg   180
aagaaacatc  aaaggagaac  gagggctggt  tcccacagac  tacgttgaaa  ttttacccag   240
tgatggaaaa  gatcaatttt  cttgtggaaa  ttcagtggct  gaccaagcct  tccttgattc   300
tctctcagcc  agcacagctc  aggccagttc  gtcggctgcc  agcaacaatc  accaggttgg   360
cagtggcaat  gacccctggt  cagcctggag  tgcctccaaa  tctgggaact  gggaaagctc   420
agaaggctgg  ggggcccagc  cagagggggc  tggagcccaa  agaaacacaa  acactcccaa   480
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ccaaacaact  agcaaaaccc  aaagagaaaa  ttcccatcat  tgttggagat  tatggcccaa   780
tgtgggttta  tcctacctct  acttttgact  tgtgtggtag  cagatcccag  aaaaggctcc   840
aaaatgtatg  gtctaaagag  ctacatcgaa  tatcagctaa  cacctactaa  cactaatcga   900
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gggtcagcca  ttccaatccc  ttctcttcca  gacaaacaag  tcacaggccg  ctttgaagag  1020
gaatttatca  aaatgcgcat  ggagagactt  caggcctgga  tgaccaggat  gtgtcgccat  1080
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ccagtaatct cagaaagtga agtttttccag cagttcctaa atttccgaga tgagaaggaa    1140
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accatggaac cagaggcacc tgacttggac ttagtagaaa tagagcagaa gtgcgaggct    1260
gtggggaagt tcaccaaggc catggatgac ggcgtgaagg agctgctgac ggtggggcag    1320
gagcactgga agcgctgcac gggcccatta cccaaggaat atcagaagat aggaaaggcc    1380
ttgcagagtt tggccacagt gttcagttcc agtggctatc aaggtgaaac agatctcaat    1440
gatgcaataa cagaagcagg aaagacttat gaagaaattg ccagtctcgt ggcagaacag    1500
ccaaagaaag atctccattt cctgatggaa tgtaatcacg agtataaagg ttttcttggc    1560
tgcttccctg acatcattgg cactcacaag ggagcaatag aaaaagtgaa agaaagtgac    1620
aaactagttg caacaagtaa aatcacccta caagacaaac agaacatggt gaagagagtc    1680
agcatcatgt cttacgcgtt gcaagctgag atgaatcact ttcacagtaa ccggatctat    1740
gattacaaca gtgtcatccg cctgtacctg gagcagcaag tgcaatttta cgaaacgatt    1800
gcagaaaagc tgaggcaggc cctcagccgc tttccagtga tgtaggacag aacgggcctt    1860
gaagagaatg ccgcgtgctt tctcctgact tggggcaatg caattcaaaa ctttttttcc    1920
cctattattc agaaaaaaaa                                                  1940
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<210> 1448
<211> 1469
<212> DNA
<213> Homo sapiens

<400> 1448
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ccctctgtgt cagcaacctg catgaagagc atcatccctg caagtcctca aggcctgggg    180
aggcctcatc ccctcctcat ttcagcaaca gcacacagga caatacgctc tagaagaact    240
ctttgactta aaggtatatg attgtatttg ttcctttaac atgaacgtga gtctggagaa    300
acagctacgg ccatcccagc cctggccaag gggaaaatgc cggaagactc cagggtggga    360
ggaagcgcgt cccaaggccc aggatctgcg aggcgacttg gggaaaacgc aggcaggacc    420
tgctgaagct cacaccgtg gaccacccag actgcctgcc gctacaggat gccctccgca    480
tctcccagga cttctttccg gcatcagtgt ggacattgac cccactggac tgcagtcaca    540
gtggactccc aaggggcagg atccacctct gatgttcagt gaagactacc agaaaagtct    600
gctagagcag taccatctgg gtctggatca aaaactcaga aaatacgtgg ttggagagct    660
catctggaat tttgccgatt tcatgactaa ccagtgtggt tgaggagtgg gcccagggca    720
ccttcaaact caaccccaat gatgaggaca tccacacagc caacaagtgc cacctgaagg    780
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atgtgtttgg catgggaccc agctcactgt tttaggtcag cccaagacta ccccgtcggt   1020
cattctgttc ctgccgtcct gtgagagccc caagccaaca aggcccactg gtgtgtctca   1080
tgaataactt tatccgggaa tcttgatggt gacctggaag gcagatggta ccctcatcac   1140
ccagagcgtg gagaagacca cgccctccaa acagagcaac aacaagtacg tggccagcag   1200
ctacctgagc ctgacgcccg agcagtggag gtcccgcaga agctacagct gccaggttat   1260
gcaagaaggg agcaccgtgg agaagtcagt ggccctgca gaatgttcat aggttccagc   1320
ccccacccca cccacagggg cctggagctg caggatccca ggggaggggt ctctctctgc   1380
atcccaagcc attcagccct tctcgctgta cccagtaaac cctcaataaa tatctttgtc   1440
agccagaaaa aaaaaaaaaa aaaaaaaaa                                        1469
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<210> 1449
<211> 1013
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (13)

842

<220>
<221> SITE
<222> (41)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (150)
<223> n equals a,t,g, or c

<400> 1449
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acagtgagtg atgcagccat ttcccacgta tctcacaatg tacttctctg gtcttactag   120
gactaaatga gtatctcagt ccataatcan agggagaaga accaccacag accacatacc   180
tggggtcttg aaaataattc catgcatgtg ggactttcag aagctgtccc atgtctgtcc   240
agaagggccc cacaatataa tgggggggact ttgtatgtgg ctaagcatgg agcaggggca   300
ggatkttcag tcccactcac tcccttggcc aagtgccctt gtgcagtgaa caaastgcac   360
aaccatgctg ggcagaagca ttttatatca gtccccttcg gacttagtct cacaggcatc   420
atttgatggg ggatggggaga tgaagtggtt cttcgttttc tagatacttt attctataag   480
ttggatcacc tcaagcaaat gcgtgagtgc agctagccaa gttctctatc tcacagtctt   540
catatggctg gctgtcgctg atgagtgagt gagctacgaa atcagcttaa agcacaacat   600
gttattttga atttgaataa aataggraaa ggcagagtgc attgtgtgac catggggtaa   660
gtaagacact ctcccttct ccttctcagt tttcctgtca taaaaggacm aactactatc   720
taaggtctcc gtagttaaaa tctttttgtt gttttttttt tatttgagac agtttggctc   780
attccccagg ctggagtgca atggtgctat cttggctccc tgcaacctgc gcctcctggg   840
ctcgggcagt tctcctgcct cagcctccca gctactcggg aggctgaggc gggagaatcg   900
cttgaacctg ggaggtggag gttgccgtga gccgagatcg tgtcactgca ctccagcctg   960
gcaacaagag ggaaactccg tctcaaaga aaaaaaaaaa aaaaaaactc gag          1013
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<210> 1450
<211> 1265
<212> DNA
<213> Homo sapiens

<400> 1450
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gggcgtgcag gaattcggca cgagctgaga ccctcacccc atcacaaaac aagtcagaca    60
gttatggggc gggcacagag ggtcaggttc tgtcaatggc ggatgggggg tgccctgggt   120
tgggcatcca ggggtcctgg gtgaagttga tctgcccgga cctctgtgac ctctttgccc   180
accatcccca gcctcacacg ccaaggatta cacagtggag aatctcatcc gcatgggcat   240
ggcaggcttg gtcctggtgt tcctcgggat tctgttattt gaggctcagc acagccagag   300
aaacccccaa gatgcagccg ggaggtgaac agcggagagg acaatgcacc cttcagcgtg   360
gtggagctca gggacagatc tgatgatccc agaaggctct ggaggacaat ctaggacgtc   420
cagagggggg tgagatttca ggccacacac tgtggaaggt aatcatgtct gatcacaaat   480
tttgggtctc caccttactt ccaatctatg ttgtgaatgc ccagttgaga cccacggaaa   540
agagctcatg ggtgagtgtg aagtgcttct ctgtcttaag ttcccagaga tccttgcctc   600
ttggaggcca gcaaacacta actcttgagg aattcatgac aatatcatct gattcctcct   660
tcccagcttg tatggcagtc tcccaccctc atgtgttcaa tctgatgatc ccaggargtt   720
ctggaacaaa atctacagcc tatgctttct ggactatctg tcgatcattc ctgaagagag   780
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tttggggaaa atatcccagc ctttgggagg ctgaggcggg cggacacgag ttcaggaatt   960
tcatgcctgt aatcccagca tagtgaaacc ccgtctctac taaaaataca aaacattagc  1020
cgagtccagc ttggccaaca tagtgaaacc ccgtctctac taaaaataca aaacattagc  1080
tgggcgtggt ggcaggtgcc tgtaatttca gctactcggg aggctgaggc aggagaattg  1140
cttgaacctg ggagacggaa gcaagttggc gccagttggt gcagtgagcc aaggtggcgc  1200
cattgcactc cggcccaggt gacagtacga gacttcatct aaaaaaaaaa aaaaaaaaaa  1260
ctcga                                                             1265
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<210> 1451

<211> 2122
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (845)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (848)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1100)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1745)
<223> n equals a,t,g, or c

<400> 1451

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agagaacatt ccttcatttc aggaggacac agagcaggct aggtctgccg cgaagactcc   180
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ctggccttgc ccagcattgt ctatgtattg gcactcttgc catccccgcc ctttcccagc   540
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gtcctcccaa agtgctggga ttacaggcgt gagccaccat gctcagccct actcttgtat   840
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cctcgtgatc cagctgcctn ggcctctcar agtgttggga ttacaggcgt gagccaccat   1140
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gtgaggacgc tgggcagagt cccaggcgtc tgctgtcagc tccccagccc ggcctgcctg   1380
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gggtcttccc atcgccctgg aggaggcttt tgtctcatct catgattcac attaaactct   2040
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aaaaaaaaaa aaaagggcgg cc                                           2122
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844

<210> 1452
<211> 643
<212> DNA
<213> Homo sapiens

<400> 1452
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cctccaaaaa aaaaagcata catattttta tttgaaatga aattattgat agtgattttt   120
tttcatttct tgtaaatatt tgcaccagga agccaaaggg gggaaaaatc atgctatctg   180
tactagaaaa tttaacctgt attactgtta tctaatatgc tttagtggtc ttcagactat   240
tcactaatta agcatgttct ttaataccac caaataatat tcattgttat gcacaacaac   300
tgcaaagaga ttgagtccca agatctacaa aggattgtga gagttggtgg ttgagatttg   360
tcacaatcag aatgggactc aactggtacc cacagtctta catttactca aatttaatcc   420
agttcaaaat tttactactg catgctttta ttcaaatgaa ccacaaatgc atgatttaaa   480
gactgctggg attacaggtg tgagccaccg cacctgacct taaaccagcc cttttggtta   540
gcatcattga ctaatactga cccaaacagc tctaattctc agccctactc caaaaaaaaa   600
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaactc gag                      643
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<210> 1453
<211> 608
<212> DNA
<213> Homo sapiens

<400> 1453
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atggtctcaa tctcctgacc ttgtgatcca cccgcctcga cctcccaaag tgctgggatc   180
acaggcgtga gccaccacgc gcggccaggg ttctttttgt atgcttttct ctctgctgca   240
tttgggattt tgtgcatatg agtctaactt aatacttttc cagatggcta tccctatccc   300
tgggcagttg gttaaaaagt cgttttttccc ctcactgatt tgggtcgcag ggactgggcc   360
tgttcctgtg tcttctggtg cttatcccac cctgttttca ttacagtaag tttcccctga   420
gctcataaag ctggtcctct ttcactttct tttcatggtt tttttggctg ttacttgctt   480
gttaattttt ccatatgagc atggtagttc cagaactgtg gtttttactg ggatcgtatt   540
aaatttacaa attgtatcgg aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   600
aactcgag                                                            608
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<210> 1454
<211> 1277
<212> DNA
<213> Homo sapiens

<400> 1454
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tgagctgttc tccagccgct cgaagtatgc acactcgtct ccatggccgg cgttcaccga   180
gaccattcac gccgacagcg tggccaagcg tccggagcac aatagatctg aaggcttgaa   240
ggtgtcctgt ggcaagtgtg gcaatgggtt gggccacgag ttcctgaacg acggccccaa   300
gccggggcag tcccgattct gaatattcag cagctcgctg aagtttgtcc ctaaaggcaa   360
agaaacttct gcctcccagg gtcactaggc gggcagccca cacccacccc agacggccac   420
cacactgagg ccacacgttg gccattccac cttggagttg gaaccctggg cgtcgagaca   480
ggaaggcagg gcgcagtggt tgaaacatca ggacactccc aaggccccgg ctctgaacaa   540
gacctttttcg tttcttggaa aagagactca tttgctgatg gttcatgcct tctgctggga   600
caggcctggg ctgtgcagcc acactgtcgg ctgacttagc cccctgctca ctctaggtgc   660
ctccaggagg tgagccctgg gtgcagctgg tctctgaatg acgttacacc ctcaccttct   720
tttcctggcc ctgtctctgg actctccct gtgaggccca attccaagac agactctcgt   780
cctcaccgaa gcttaggccc acatctccca ggctgcttag gagacagaat ggaaacggag   840
gccgcccctg ccagccgccc tggccctggt cactgcatga tccgctctgg tcaaaccctt   900
ccaggccagc cagagtgggg atggtctgtg acctgctggg aaggcaggct gatggggcac   960
acccttggcc tctcgtccac gagggagaa acctaaaccc tgtttcacaa tctgtgcgga  1020
agtagcttgc ctcacttctg cttaggaaag cggctgttgc tccataactc taaccagcac  1080
```

845

```
agggctgagg cctgcagtgc acacctgcag ggaggccctt cccaaggtgt ggtgactgtg    1140
ccttactgta catgctcgga ggcctggcca tataggaggg tgggtgatgc tgaaatcacc    1200
ccccatctta agtaattact ttctggagta atcaggtgga aatccataga caaatgaaaa    1260
aaaaaaaaaa aaaaaaa                                                    1277


<210> 1455
<211> 1982
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (666)
<223> n equals a,t,g, or c

<400> 1455
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ctaggcccag ttctgtcact ggctcactaa atgacttcag gcatgtccct ctcctatttt    120
gaacttcagt tttctcttct gtgaaatgaa agccttggac taggcagcgt ctaaaggctc    180
tgtcactccg taattgtgtg actttggtaa ctttgtttga cttctccttg cttaagtttt    240
ctcatatggg tatggtaagg aaaataccta cctcacagga ttttctaaca attttgtgat    300
tattaagtat gatgactgat gactaatata tgacagccag ctcttacaca gtgctttcta    360
tatcctggac tgttgtaagt gcttttaatc cccgcaacaa tcccatctcc attttacaaa    420
tgaaaaatag aggtcacacg gctaatacgt gtcagagttt ggattaaaac ccagaaaaat    480
ctgtccccag agacaatgat tttaactagc atgccctttt gctcaataaa tgttaattcc    540
ctcacccttt ccacacacac acagtctagc tgaccattca tagacaataa tcccactttc    600
acagtccatc caacaagatc ttaaaaaaac catgaaaatc tctaggtttc ttttgcaaat    660
agtttncaag catttaaaaa aaaaaggtgg ggggcgggga gggagtggcc aaaatggctg    720
actaaaagca gctaggatga gtggttctca tggaggggaa ggaaaggggc gagtaaatac    780
agcgccttca actgaaacat ccaggtaccc acattgggtc taatcaagga aacaactcga    840
tccacagaga atgaagaaaa gcaaggcagg atgacagccc acccaggagc aacatggaga    900
cagaggaacc tcctccaccc agggaagtcg taagtgaatg tgcgatcctg ggaaaccacg    960
ctcctcccat ggatccttgc aacccttggg tcaggagatc ccctggtgaa cccactccac   1020
cagggccttc agtctgacac acagagatac atggagtctc agcagagtag ccgcttgagc   1080
acgtgcagag acccagcagc tttacatact ccggccctgg gtttcccagc aaaagtaact   1140
gcaactcctg caaagcggga gattagaccc ctgtacatac ccctaggaaa gaggctgaat   1200
ccaggggggcc aagcggcacg atctgcgggc cccacttcca ctgcacctca caggataaga   1260
cccactggtt tggaattcca gccagccacc agcagcagtg ttgcacctac ctgggacgga   1320
ggtcccaggg ggaagggcag gctgctctct gggacagagc tcccagaagt ggtaccccag   1380
aacagcacag cacagctgct cttcagaagc atggccagac tgcttcttta agcaagtgcc   1440
caatctgttc ctcctcactg ggtgggactt ttcaaccaag gcctccagca accctactg   1500
gtgttctctg gctgacagag atttgaattc tccctgggac agagttcccg gagggaggga   1560
ggggccacca tctttgctgt ttgggcgact tagctgttcc ggcctccagg ctttggagag   1620
cccacaccaa ccaggggtgg aagcagtgcc ccagcacagc acagctgatc tgtgaaagca   1680
tggacagact gcttctttaa gcagttccct gatcccgttc ctcctgactg ggtgagacct   1740
cccaaccagg gtctccagcc ttgtcctgca ggcgcatttg ggctggcaac aggtctgtac   1800
ctcgctgggc cggagctccc agaggaagag gcaggatgac atctttgctg tttcacagcc   1860
ttcactggtg atagctccag gtactggaaa atccaaggag actaggaact ggagaagaag   1920
cccagcaaag tacagcagcc ctacagaaac atggccagac tgttaaaaaa aaaaaaaaaa   1980
aa                                                                   1982


<210> 1456
<211> 1600
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (95)
<223> n equals a,t,g, or c
```

846

<400> 1456

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ctccattaag aattcattac taatagcaga agattttaaa ctatctctgt tggtagatga       60
agtgattctt gcatagatag agagagccat ttgtnaccac agctggctaa gtcccctcc       120
ttccttcact tagtctgtat tagtttgcta gagctgccat aacaaaatat cagagtctga       180
gtagctttaa caacaggaat ccactttctc acacttctgg aggttggaaa cccaagatca       240
aggtgctggc agggtgggtt tcacagagag cttttcaagga aggatctgtt ctgggccttt       300
cttttttgaca tgtagatggc tgcccttttta ttgcctcttc atctgtgtct gtgtgctcct       360
gatgtctctc tctgtgtgtc caaacatcat cttataagga caccagtagg aacggattag       420
gtcctaccct aatggtcaca ttttttactt gattttctct ttaaaggctt tatatccaaa       480
tacagtcatg gtctgaggta caaggtgtta gggcttcaaa catacgaatt tgtgggagtc       540
aattcagctc ataacatagt ccatgagctt gtactaattg gaagtgagga ttaggttttt       600
agttgtttcc ttccttccaa ttactctaga tctttctcca cttccagttg accaatccct       660
tcatgctgcc agccccacat ttgacttgac tgcctttacc tacactctcc agtctttgtt       720
attctttcct tcctcacatc caaatgtaac tctgccacaa cccactagac ctctattagg       780
aatcatttga aaactaaaaa gtaaaacatc tatttgaccc ccttgaccca tgctttctgg       840
ctgcatatta aaaataatag caaaaatcat gattacttttt gcaccaacct aatattaaaa       900
tcatctgggg tgttttataa aaatacctat gtctgggccc taataccaga tcttctggtt       960
tggttggtgg agtgaggccc gtgttcctga tgatctgacc actctcatac atttctgtct      1020
gtgcttctct tagcctaaaa tgctctgtgc tttttttcca actcatgaat tcttatctat      1080
tcgaatttat aggtggactg tcacttcctc aagaaagcct ccatcagtta ccccagggta      1140
gtgtattagg gtcagtctag cagagcagta ggtaacgtga actaaaggca tagagacctg      1200
agtgtgaatg tcttactttg atctttctta accaggggac tttgaacatt ttcttaagcc      1260
tgttgagcct cattgkggta atcatgaaaa gggaaagtct taaagcatgt cacatagggt      1320
tgatgtgaga attaagaaaa ttaccatatg tatgcttcct agctggtagt acatgtccat      1380
ttaataatct ctccttctgg tggcgggcac ctgtaatccc agctacttgg gaggctgagg      1440
caggagaatg gcgtgaaccc gggaggcgga gcttgcagtg agccgagaca gcgccactgc      1500
actccagcct gggcgacagc gagactccgt ctcaaaaaaa aaaaaaaaaa aaaaaaaaa      1560
ggaattcgat atcaagctta tcgataccgt cgacctcgag                          1600
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<210> 1457
<211> 1818
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1007)
<223> n equals a,t,g, or c

<400> 1457

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cccccgggct gcaggaattc cccacaccta gcctacattc ttttttaaatt ttttgtttttt       60
agttgaccta taatacttgt agaaagacaa agaatacagt gtgatgtttc agtgcatata       120
tgcattgtat aaggatcaaa tgagggtaat tatatccatc actaagcatt tatcatttat       180
ttgttgtggt aatattcaaa atcttctctt ctagctatct tgaaatgtct atcacattgt       240
tatttgctgt actcacctta ctgtgtaatg gaacaccaga acttattctt cctgtctgat       300
tgtaacttaa tacccattga aacaacttct catggtcccc cccttccccc atactcccca       360
gccataggta accactgttc tattctctgc ttctgtgaaa tcaactttta aaattcaagg       420
gtgaaattac acagtgtttg cctttctgtg ccttgctatt tcacttaaca taatggcctt       480
taggttcatc catattacca caaacgacgg aagaatattc tgtttataat gttccatttt       540
gtgtgtgtgt atacacagac acacggcatt ttctttgtcc attcatctgt agatgggtgt       600
ttaggttgat tcatgtcttg actattgtga atggcactgc agtaaacatg ggagtgcaat       660
tatctcttca atatactgat ctcatttccc ttttgattta cacccaaaag catagggaac       720
aaaagcaaaa acagacaaat gggattacat caaactacaa agcttctgca cagcaaagga       780
aacaaacaat atagatcgaa gagacaacct gaagaatagg agaaagtact tgtaaacttt       840
atgcatctga caaagagtta atatccagaa catataagga actcaactca atagaaaaaa       900
aattcagtta aaaaatgggc aaaagacctg cgtagacatt tctaaaaaga acacatacaa       960
atggctgaca gatatatgaa aatatgctta acatcactaa ttatcangaa aatgcaaatc      1020
aaaaccacag tgagatacta cctcaccccca gtcagaatgg ctgttctcaa aaagacaaag      1080
gataacaaat gttgggaagg atgtggagaa aggggaactc ttatgcactt ttgatgagaa      1140
tgtaaattag tacaactatt atgggaaaca gtatggaggt tctcccgcct cccccagagg      1200
caggttctct ctctgttgcc caggctggag tgcagtggtg taatcatagc tcgcttggcc      1260
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847

```
tcaaacttat gagctcaagt catcctcttg cctcagcctt ctgagtagct gggactatag      1320
gtgtgtgcca cgtcatctag ttagttctta attttttata gagacagtgt cttgctatgt      1380
ttcacaagct ggtcttgaac ttctggcctc aagcaatcct cctccattgg cctcccaaag      1440
cactgggctt tataagcatg agccacccta cccagctgga ggttcttcac aaaaaaagat      1500
tggctatata tccaaagaaa ataaataata cattctttca tagcaaaaga gaggatcagc      1560
atatattaaa gagtgcttat tttaccactg aacaagttgt aaaagtagac gttcttaagc      1620
tcatgagcct gtggtaaata ctaggtagtc actcaaaatg tgtagatttc aagcatactt      1680
tggactttgg aagtagacac atgagattgt agcacggaat cctaaaatcc taggccaaag      1740
aagactttta gaaatcatag ttcatactgt ttcttttatg caggatttag ctaatccatc      1800
ttagaaaaaa aaaaaaaa                                                    1818
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<210> 1458
<211> 1264
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1101)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1136)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1152)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1156)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1159)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1170)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1175)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1197)
<223> n equals a,t,g, or c

<400> 1458
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cgtgtgtgtg tgtgtgtgtg tgtgtataat cattgataaa gacaaactaa ttttttgatc      60
taaattctaa gttaatttcg tcacttgtta tgtgtgtctt atttttattt tgtcagacca      120
cagataattt gtttcttact ccttgactac cttcttcttt ttagatggcc aaatgtgatg      180
cttgtaagcg acagggtaaa ctcagtgagt ccttgaaatg gcgaggggaa atgaaacatt      240
```

848

```
tctgtaacct gctttgtatc ttgatgttct gtaatcagca aagtgtatgt gacccgcctt    300
cacaaaataa tgcaggtaaa attaacctta ggtactgaat ggagtctttg gtcaatacta    360
ggaactactg ttcttttaca gatcaggaac tgtgtaaaca gttgtcatta atttcatgaa    420
acctcagttt ccttgtattc tgtatcaata acatttagct ttttttgttg aacaccttat    480
ttcactgtcg tccgtgtgaa gagaccacca aacaggcttt gtgtgagcaa caaggctgtt    540
tatttcacct gggtgcaggc ggtctgagtc tgaaaagagt cagtgaaggg agatggggtg    600
gggccgtttt ataagatttg ggtaggtaaa ggaaaaaggg gggttgttct ctggcgagca    660
ggagtggggg tcacaaagtg ctcagtgggg gagctttttg agccaggatg agccaggaaa    720
aggaatttca caaggtaatg tcatcagtta aggcaggaac aggccatttt cacttctttt    780
gtgttggaat gtcatcagtt aaggcaggaa ccggccatct ggatgtgtac ctgcaggtca    840
gaggggatat gatggcttag cttgggctca gaggcctgac accttagatt aaagctgagt    900
aaaaatgagt ttttgattaa atagatttct ttgagaatat tgaatcaaat aaactctgta    960
agaacttaaa tttatgggaa aggataacag ttaatggttt gtaattgagt ataattggct   1020
tccttaaaaa atcctttgag actacttata acaaaagaca taaagtcaaa atcacaggcc   1080
ttttaaatat accatgtgca ngccagatgt gatggttcat gcctgtaatc ccaccncctt   1140
tggaatgctg angtgngang acggcttgan gccangagtt caggggtgga gtgagcngtg   1200
accacagcac agcaatccca gctggatgat atagtgagac cctgcctcta aaaaaaaaa    1260
                                                                    1264
aaag
```

<210> 1459
<211> 1366
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (758)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (858)
<223> n equals a,t,g, or c

<400> 1459
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gaattccgta acataaactg tggttctcag tctgttagct attcagattt ttcacaatgg     60
tttttgatac gtaatgagaa ataacctact aagtaaatag gaccccttgc tcaaagaagt    120
gtgaaaagag catttccttg ctttcctgac atgctaggaa gcaaggcaag cctaaggatt    180
cttctctgct tattcttttt tctccctagg cacagttcga gtgacaactg ctgcccatct    240
tgcactgctg gtggctaaaa acatctcctt ctttcccagc aatgtggagc aatttttctga   300
gggcaacatt gatgtgtggt ggattgtgca tgatggggggg atgctatgct actaccattc   360
ctactgaaac agcacaaggt attttataca actttttttt tacaaaagtc tttctcccctt   420
ctgtcctggt tcacaggaca gacaaattct tcctctgatt ataatagtgt tggggtttag    480
aatcagaga gttggaagtt attctaggct ttcccatgat cccactttca aacaagagaa    540
atcattgtct ttgtatttga tacctactta tctccaagtg aaattcagcc aattaataaa    600
gttccatatg agccctaggg gaaaacaaca agtgaacaca tctttttttta aaaaatactg    660
aaaacttaag gtatatgtat atgtgtgtat tgcacgcata tatgcgctca ttccgtggta    720
agactaatta aatgagattt aaaatagtaa atatatantc tgcatgttgt cattgataca    780
ctgtctgaat aaagtaccct cttaacgtat cgtgaaccat cttttctttt gccagtgttt    840
tcttgttatg aaattaanga ctccttaaaa ctgtattaaa tgtggtgttt agtcaatctt    900
ttgccctaat acaataacat agcaagtrgg aagctaggac aaatagcctt atactacata    960
tagcaaggtc ttctagmcca caatgtctaa tgtcttagga ataacctttt tttgcctcct   1020
tgctctaatt tttcacatgt gtatgtcact ctctcaggtg tggcgaaagt gcagcatacg   1080
gatcttcaca gtagcccaat tagaagacaa cagtatccaa atgaagaagg acctagccac   1140
cttcctatat cacttacgca ttgaggcgga ggtagaagtg gtggagatgg tgagaaagct   1200
gagtttgaga tacaagaggt tcattcccccc attcctctcc ctgtcttcct tgaatctttt   1260
ctggtttggg aaattttttca gatctaaatg tggattaatc ccctagtgcc aaaaaaaaaa   1320
aaaaaagga attcgatatc aagcttatcg ataccgtcga cctcga                    1366
```

<210> 1460
<211> 2077
```

<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (936)
<223> n equals a,t,g, or c

<400> 1460
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aattcctaag atgatagcag taatgaagag aaatggacct tgagtttcag aaacttgtat      60
tctaatggac cttcaaaaga tggcaagtat tgtgtctgga attggtgggt tcttggtctc     120
gctgacttca agaatgaagc cacggaccct cgcggtgagt gttacagttc ttaaagatgg     180
tgtgtctaga gtttgttcct tcagatgttc agatgtttct ggagtttctt ccttctggtg     240
ggtttgtggt cttgctggct tcaggagtga agctacagac cttcacggtg agtgttgcag     300
ctcataaagg tggcgcggac ccaaagaatg agcagcagca agatttattg caaagagcca     360
aagaacaaag cttccacagc gtggtaaggg gacccgagtg ggttgctgcc gctggctcgg     420
gcagcctgct tttattccct tatctgaccc cacccacagc ctactgattg gcccatttta     480
tggagagctg attggtccat tttacagaga gctgattggt ccattttgac agggtgttga     540
ttggtgcgtt tacaatccct gagctagaca cagagtgctg attggtgtat ttacaatcct     600
ctarctagat gtaaaagtct ccaagtcctc actagattaa ctagacacag agcactgatt     660
ggkgtgttta caaaccttga gatagacaca gggtgctaat tggkgkattt acaatccttt     720
agctagacat aaaggttctc caagccccca ccagattagc tagatacaga gtgctcattg     780
gtgcatccac gaaccctgag ctagacacag agtgctgatt ggtgcatata cagtcctcca     840
gctagacata aaagttctcc aagtcgtcac ctgactcagg agcccasctg gcttcgccta     900
gtggatcccg cgccagggcc gtgggtggag ctgccnaccw gtcccgcacg gcgcctgcac     960
ttytcagccc ttggcagtca atgggactgg gtgccgtgra gcaggggtg atgcctgttg    1020
ggraggctcg gtccatgctg gagcccaccg ccaggggggct cggccatggc gggctgcagg    1080
tcccgagccc tgccccgcgg ggaggtggct gaggcctggc gagagttcga gtgtggcacg    1140
ggcagtctgg cactgctggg ggatccggcg ctccctggcc tgggtgctaa gtccctcact    1200
gcccgggggcc ggccggcttc tctgagtgtg gggcctgcca agcccacgcc cacccagaac    1260
tttcactggc ccacgagcac cacacgcagc ccgggttccc accgtgcct ctccttccac    1320
acctccccgc aagcagaggg ggctggctcc atacttggcc agcccagaga ggggctccca    1380
cagtgcagca gcggactgat gggctcctca agggtggcca gagcagacgc caaggccgag    1440
gaggcgctga gagcgagcga gggccgccag cacgttgtca cctctcagta tgagtgtgtt    1500
gtagtgtatg tgtgaaaggg agttttgcaa tgggagtatg ggatgatgtg ttagtcatag    1560
ttctacagag aaatagacta tctatctatc tatatctcag agagagagag agagagagat    1620
tgagtgtaag gaattggctc atgcaattat ggagaccaag tgccaagata tggagacagc    1680
aagctggaga ctcaggagag ctgtggcgta gtagtttctg tccaagtcca gaggcctgag    1740
aaccaggaga gccagtagta taagttctag tctgaaagct ggcaggccca agaccaagaa    1800
gagcccaagt ttcagtttga gtcccgaagc aggaaaagac tgatattcca tttcaagcag    1860
tcagacaagt cttatggcag ggtcagcctt ttagttctct tcaggccatc aactgattgg    1920
ataagggcga ctcacattag ggagggcaat ttgcttccaa ttcagctgtt tatctcatca    1980
aaaaacaccc tcacagacac acttggaata atgtttgacc aaatgtctgg acactttgtg    2040
ccccagtatc aagcttatcg ataccgtcga cctcgag                            2077
```

<210> 1461
<211> 1993
<212> DNA
<213> Homo sapiens

<400> 1461
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ccagatatca agataagaaa ggtttgaaat gctcagtgtt aaaataggat cacaggtcat      60
tgtaaaacag tcatttaaac aaagtgataa gtcagtgatt tttaaaaagt caaaacctgt     120
gctctttgat tagcaggaga ctccatcaaa gagtaagttt gaggagactg tatcaaagag     180
taagactcca tcaaagactc acttttccaa ataagaccta ataaggcag catgagctca     240
agaaaatctc tctctccctc ctttttctttt gtagtttact caaaagtaaa caaaacctt     300
tactatctcc tgttaacact acctgaaaat cttgttcaaa agagaaacg aaatcctacc     360
tttgtatcag tatattatta atattaaacc taatttttaat aaaatcttac aataaacaga     420
tccatctgat cccagtcagc tttgaccaga taagattttc atgaatcttt tataaactct     480
tacaatttta atttttcttt ctccaacttt ttagtttttag ctatatcatg taaattttga     540
aacaatcttt aacctctaaa ctaggcaaaa ttactttttcc tttagcaaaa ctcacaccct     600
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850

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cctctctttt ttataacttt cttcaccaaa aacacatcct actttcattg tatactttgc    660
atacaagagt gtttcccatg tatctagtac ttttaattac atatattaac tacgatttta    720
actcttagta gttctaattt caagtgaaaa acctagaaag taagtagtag ttaactggtt    780
tatgtctgta tttgtagaca aatcatttca tggtttcgta gaaagatatt tctataaaat    840
ataattgatg cctacttttt tgtttattaa cagatctaaa gattattaac agatctaaat    900
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acatatctaa taattaatgt ttttgtatct taatgtatgt agaaatgact caaacatttt   1020
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tcaagtttat tgtatatgcc tgaagccctt accaagtttt aaataacaag tagcaaattt   1860
atatttcaag cacagagaat ttaagctttc caaaaggcca attcaatttt acgttatctt   1920
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<210> 1462
<211> 1932
<212> DNA
<213> Homo sapiens

<400> 1462
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gcttcagagc ctgtccccag cttcaggtgt ggctccctga gttggggggct tcctaggtga    360
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ccagctactc gggaggctga ggcaggagaa tggtgtgaac ctgggaggcg gaggttgcag    1860
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tctaaatctc ctttgtccac attgtcattc tccagcttgt tgttcttttc agtggtgagg     180
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<400> 1464
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gacacccttg acctcggsct cattagctcc atcctcttac ctactgagct cacaaccacc     480
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852

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tgagaacaac aaacacacct actgctgagt caaatcaggc caaagggaaa agaggaagga      660
tctgtgagga ggagagacca taagcctcca atcacactca ggaataaaat ggggctaaat      720
tccaaatgag attaacaaaa aaaataatga gagaaagact aagagacaga aagaaaaccc      780
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<210> 1465
<211> 1625
<212> DNA
<213> Homo sapiens

<400> 1465
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gtcaaccttc gtttgagtca tacagttttc taggcaaagg ctacattatg tcacatttat     1140
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cagtgtgacg aaagcccatc tttacaaaaa atacaaaaat tagccagggg tggtggcatg     1440
tccgtggtcc caactacttg cgggattgtg gcgggaagga tcacttgagc tctggaggtc     1500
aaggctgcag tgagctgtgt ttgcaccatt gccctccagc ctgagtgaca gagtgaaacc     1560
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tcgag                                                                 1625
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<210> 1466
<211> 2128
<212> DNA
<213> Homo sapiens

<400> 1466
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tcagttcgtc ctgagatctt ctcatgtctc tcacgtcttt gaaaatggcc tgtgaacaga      660
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                                853
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ctgcatcata tgtaggatgt ctggcaaaat agtgtacagc gttcttttct caaatgagag      720
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gaaaattctt tggccaaaac aagataagcc ttatcgatat gaaaactgga aaacatcaca      840
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acaggggata ggtgccatgt ggtttgcacc accgcagcag gctttgggtc ccaaagacgc     2040
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<210> 1467
<211> 1309
<212> DNA
<213> Homo sapiens
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<400> 1467
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caaaaatatg gaagtcttca ctagtttgtg tgtcatcctt gcgcaggtgc catgctcatc      180
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<210> 1468
<211> 1686
<212> DNA
<213> Homo sapiens.
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<400> 1468
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854

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<210> 1469
<211> 2153
<212> DNA
<213> Homo sapiens

<400> 1469
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<210> 1470
<211> 1790
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (99)
<223> n equals a,t,g, or c


<400> 1470
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gaggrgtgga ggaagtcttg ggtggtgtgg acagaaggaa gagaggagag ggtgagtggg     180
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catatttgta tgcagtagag agcctgttgt agaaacgct ccctgtatct tgctgtactg     1620
ttaaagaaag ctgaattcca cattgccaac aaaagcgtga aaatgttcat gaaccttcct    1680
ccaggaaaag ccattcaagc ctgattattt ttctaagtaa cttcaattaa attgaagaaa    1740
aaagaaaaaa aggaattcga tatcaagctt atcgataccg tcgacctcga               1790


<210> 1471
<211> 1319
<212> DNA
<213> Homo sapiens


<400> 1471
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856

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tagtcaaagt cagcttgtca tgactcatca taggcttttct aacctacttc cctgaatccg    240
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cagtagtcat gtgaataaaa ttcttattgt ctaaattgag acagcctcag atatttgcag    420
atatttactt tttgtctgat atcagtacat atttggacaa agtcatctaa ataatagttt    480
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<210> 1472
<211> 1504
<212> DNA
<213> Homo sapiens

<400> 1472
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tcttggtgaa tgttccatat gtacttgaga agaatgtgta ttatattgtt ggttgtagtg    180
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atagtgtgtg gttgtgtgtc tttgtttttc tttgtcccat ctgctttttg ggttctttga    300
ttttcttctg gtgtttcttc ttctggatta atcaaggatt ttataatatt cagatttatc    360
tcctctgttg gggttttagc tgtacctctt tattttttaa gaggctgttc tagggattac    420
agaatgcatt ctcaatttat cataaaatag caagaatatt ataccacctt acatgtttca    480
catgtaataa aacatacttt catatactat tttcatcctt tgtgctttta ttgtcataag    540
ttttgcttct aaatgtatta tagttattgt attttgtgat tatttgtgct tcagaaagtt    600
attctttgaa gaaactaaga aatgagaaaa attaacatct acctgtatat tcaacatcta    660
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<210> 1473
<211> 1645
<212> DNA
<213> Homo sapiens

<400> 1473
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857

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gctgacccct gtgcaaactt cgtcaaaggt aactttgact tactgcgtac tcttgattag     180
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cagtacctta gccaaattac tgtctcaccc aaataataat tggacatagt tttgtaattt     660
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<210> 1474
<211> 1466
<212> DNA
<213> Homo sapiens

<400> 1474
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gtaatattat caagctatgt cttttgatta aaatgtatta tatggtttac cttgattaaa     180
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gctttgtgtc tctagggttt tagtttattt ttaccagatc aaactttaga attcgactaa     480
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atgaggagat gccatttgca tcctgtgtgg gtgacagcta tgctttgatt cctcttggat     600
ctgtaggact acttgcctgt aagacctcat gtattgttct ggggggtctgc cagagaggga    660
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858

<210> 1475
<211> 1828
<212> DNA
<213> Homo sapiens

<400> 1475
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<210> 1476
<211> 2746
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (26)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (35)

859

<400> 1476

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cartttgcca tctctggttc tgtgctataa tcagaattgt aattatgttc tccagaggcc   1980
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gttttgatga aatgaatgtt tttgtataat ggccttaaac ttttctggaa gtatttcaaa   2700
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<210> 1477
<211> 1507
<212> DNA
<213> Homo sapiens

<400> 1477

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atttttggaa cactggactc tctaattcct ctacatgaag agctccttag tcagcttcga     180
gatgttagga agcctgatgg ctcgactgaa catgttggtc ccatcctcgt gggctggctc     240
ccttgcctca gctcctatga tagctactgc agcaatcaag tagccgccaa agctctgctg     300
gaccacaaaa agcaagatca ccgagtccag gatttcctac agcgatgttt agaatccccc     360
tttagccgca aactagatct ctggaatttc ctcgatattc caagaagccg cctggtaaaa     420
taccctctgc ttctccgaga aatcttgagg cacacaccaa atgataatcc agatcagcag     480
cacttggaag aagctataaa tatcattcag ggaattgtgg cagaaatcaa caccaagact     540
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gactccctga tcgacagctc tcgagtcttg tgttgtcatg gtgaactgaa gaacaatcgg     660
ggcgtgaaac tgcatgtttt cctcttccaa gaagtgcttg tgatcactcg agccgtcacc     720
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aaaaaaa

<210> 1478
<211> 1597
<212> DNA
<213> Homo sapiens

<400> 1478
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tagggatgat gggggtgact attaacacat tgagcactca tgtgcagaca ttgttccaag     180
cagtttttat atattaatcc tcgaaacaac ccaaggcacg gtagcagagg tacagagaag     240
tcacacccaa ggtcacacag tgggaagcag agtttttagg agagggaaga agggcagtat     300
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aatgtgtaaa agtgctttgt gaaggtaaar tgcttagaaa cgtagttata ttacacagct     540
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aactggtggc aagtttctct ggactcttag gtttattttt aatatgaaat ataaaaacag    1500
tttcaaatat cttattgagg gagaagtaaa aacttattta aacaaaaaaa aaaaaaagga    1560
                                                                     1597
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<210> 1479
<211> 1294
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (668)
<223> n equals a,t,g, or c

<400> 1479
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caagagagat gggagttggg ggtggggctt gaaggagagc acacctggcc ccaggtgaca   240
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tttgaggacc tcaggaaaat gagggagctt aaaaaattct atggttccta atgaaatact   360
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cctactggct ggtcctgtgc agctcactca tttctcagga acagcagcag actcactact   600
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ttagagtact ttaaaataaa tctcagctaa ttatacatac aactgcattc actaaatgtg   840
aatattttca ggctttcttt gctaccaagt gccacctgct catgatttaa atgggcacaa   900
atttagttcc attaaacaaa atgcagcaac tcttctccta tagcgcaaac tcctttaggt   960
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gcaaataggt ttgttgatga tgaagtggtt tgtgttttat aagagtcctt atggtctaga  1140
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<210> 1480
<211> 2284
<212> DNA
<213> Homo sapiens

<400> 1480
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gattccccag tgggtgtata gatgaattta taatttatgt ggctggatgg aagcctgggt   540
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ttctgtccag gcctgccgtt cattccaaag gcttgcattt caaaactgca ggcttggacc   660
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tacccctttt tccgaacaaa aaacaatacc tgccctgtt ccaaaggtgt cttactattc  1140
caataaagaa tgcatgcctg ggaataaaaa gaagcttaga ctactgttcc aatggagcta  1200
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862

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aggg                                                                 2284
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<210> 1481
<211> 1395
<212> DNA
<213> Homo sapiens

<400> 1481
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tgtggtctcc tcggtgctgg ccacagctgt gggtccccag gaatattgtg ctgcaggtct    180
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aatgtatctg aaaggttgct aatttctcac tgtccttgct tcccaggacg ccaggaaagc    420
atgtgcagat gcaactctct ctcaggtaag agcccactga gtcacgcaga gccatctgcc    480
tgtgaggagg ctagcacggc acccacacct ggagcctcgg gagggctctg cttgcattct    540
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tgttacgtga acttcacctt attaaaaaaa aaaaggaat tcgatatcaa gcttatcgat   1380
accgtcgacc tcgag                                                    1395
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<210> 1482
<211> 1229
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (710)
<223> n equals a,t,g, or c

<400> 1482

863

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aaagtgctgg gattacaggc gtgagtcacc atgtccagcc cacatacact tttaaaaata   180
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<210> 1483
<211> 1166
<212> DNA
<213> Homo sapiens

<400> 1483
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<210> 1484
<211> 2375
<212> DNA
<213> Homo sapiens

<400> 1484
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tattgatcaa atcaagtcac agtgccagcc cagattcaaa tggtggggaa agagacttca   360
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864

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tttatggaag ggaggagctg caaatttcat tgccaagagg tgtggatacc cagaaagata    420
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gagtgggatg tgtcctgtat gactggaatc gttttctatt tgtaacagag aagcgtgccc    540
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cgtctgcatc ctgctgatct tcctgtgccc aggacgctcc ttggcttatg ggtgaaacag   1620
gcatgcgttg ctcaacctga agtaacagcg agagctcctt ccagacatca ctcagcttcc   1680
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ccagaggctt gatcaggccg aggacgcggt ggcccaggcg ccggcactgt ttcttgcagt   1920
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tttccatgcc ttcgcgcctc ccgaggggtg tgcgtccaat ctgtcccgtg cacagttcca   2040
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aaacgcgagg cccgcgggag ttcccctgcg ccccctttcc tggtgcccgc accctgcact   2160
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tgagggaaac cccggccact gcagctgcac ttgagcaggg tccctccact cagccacttg   2280
gatggctgtt tctgtccagt gccctccgga ggccactgcc tcaggtctgt gatgcctgca   2340
gagaatggaa ttcgatatca agcttatcga taccg                              2375
```

<210> 1485
<211> 1330
<212> DNA
<213> Homo sapiens

<400> 1485
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tacacaagcc tccacccagc ttctaattgt ctcactgaga acagacaaaa ctccagtaga     60
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tgtagtgcag catgattctg ttttttctgct gggcccctat ttgcttcttt ctgtgcaatg   180
aatcattgaa agagtgacca ccacggactt ggagaatctt tgtagctttt agtctgtgtt    240
tgggtgtggc tggagagaca aattaacaca cagagccgga ccttgaaggg gaaggtcctc    300
atttgtctca gattgggatc atttggggaa tcagaaaatg tttatatcag aaaagaagag    360
aagtcaatgt gtttcgcagg tttgtggttt tttgaaggag aaacatctag attctagtcc    420
tgttcctctg cctccttctt aggtgatgtt agmcaaaata attcacctyt ctgagtcaat    480
ttgcttatct gaaaaatagc awtaacaaca gcactcattt tactagggca tgtgaataam    540
cagatttttt cccattgagt ggcaggtatt tattgagtgc ctactatgtg ccaggcacca    600
tcctactctc tggggataca gcagtgamca aamcagacgc acacctagtg atgagggatg    660
gagtaaagcc cttagccgat gccagacaga ggacatgagt cacctgtagt cgctgccact    720
gctgctattt catggctaca ttttgacccc tgtggaccca ctgaaacctc ctcactgcct    780
cacaggcaga acaaggacag ggtcttggcc accaagttta ctctctgag ctgcatttag    840
attattcttc cagctaggcc atgacagtag gtagtggcag ctctctgtaa agatgagggg    900
tccccagctc ggacccctgg tttcctccac ctgcctggac cttacagtgg tagcaggtg    960
tgtcctgctg actgggaagc tccttacctg ggtgcttgaa gtatggctcc ttagcatgtg   1020
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ctggaactcc cgaggaagtg cctgcagatt gcctggcagg tcttattcgg gtgatgtaga   1140
gcagaacgct ggggccaggt tctgaagtca gacccctgga ctcaactcac gcacaactcc   1200
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865

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ttacctccaa actgtgkggc cttggtcars graactgact tctctgagct tcattttctt    1260
catcttaaaa aaaaaaagga gaatcacacc acctacccca tggagttgtt atgaggcaga    1320
gagatgtgat                                                           1330


<210> 1486
<211> 1470
<212> DNA
<213> Homo sapiens

<400> 1486
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taaatctact gaagcagtgg ggcaaggaga aaggagaggt gactgctgat gtttttaaag     120
ctctgacagt cacatataga ttgtcccagg tacccctgct gcccccaaga cactccaaag     180
gcaaagatgg atggtgacaa agtaaccttc atgcagaaac aagaacagtc accccccaaca    240
acaagccctg ctgaaggtga agaatgccac caggctgcct ggcagttact gagtgcttat     300
tcctgctagc ctattggagt cacgtcatat ttgttacatg gtaacttaat tgtgccttcc     360
acgccttcac aaaatcagtt gtacaagaga aggcacccac cacagtccat gtgacctttc     420
tcggtctgat ttacatagtg gggatgatga cactcgcgtt gtagagtagt tgcacgatta     480
aacctggcac acagacataa agcactcaat gtctgacaca tagtggactc tcaagaagtt     540
tgtcatgcag gggacacttg aatgcccagt atgggccaga cagcatcagc tcatttcagt     600
cccacagccc tgtgagggag gaactctgcc ctgtttaca gttagggaaa ttgaggcaca      660
aaggctaaga agtcgatatc caagggcaca gaatgattgg gtgacggtga gcccaggcag     720
tgtgacaaca aggttgctgc cccacgccac ctctgtcttt cgtgggtatg tcggtgtgag     780
gtgtaggcag ccctgcactg gcattcagca ggcgggactc ccgggcaggc tcttctgcga     840
acactcatgg gccaccagcc ctttctggaa cttgcctttt tttttttttt acctgaaagc     900
tacgtgaatc gttggtaaat tggtgtaara atggaactga gtcatctcaa aagttccttt     960
cagttctaaa atyctgkgaa ttgaagccta ctttttcact ttaaatgatt tattgggttt    1020
acagttcttt acgctttctg attgaactga tttgaagttc ttatttcgtg tgttggggaa    1080
cacaccccca acccgtcaca gcgtggccgt gggtgggaga trracgttag gctggccagt    1140
cactaggggg cagcatcagc acgggtctgg ctgtccctgg ccttagggag cagtttctgc    1200
ccctcctgcc ccgtcagaaa gtctcggact cctctctgct tgcatgtgta aagttttcat    1260
tttcaggggc cttttagtca aaaaaaataa agctgtatga cttagtgctg aaggatatga    1320
attaggcgta gctcttgggt tggcagcata aaccaagggg catcaaccca ccaccgacaa    1380
gctaagaatg gttttacat ctttaaatgg ttgaaaaaa aaaaaaaaa ggaattcgat       1440
atcaagctta tcgataccgt cgacctcgag                                     1470


<210> 1487
<211> 1725
<212> DNA
<213> Homo sapiens

<400> 1487
cctttttttt ctgttgttgt tctacttctg ggagacttct tcaactttgt attctaatat      60
ttctctgaat ggaaaacaac ttcatatatg attcacacac cacataattc acctatttaa     120
agttcaatgg ttttggtat attacattat tagttttta ataattgtag taaaacatat       180
aatacaaaac agttatcatt ctgaccactt ttaagtgtac cattcagtgg caataactta     240
gtgttgtgca accataacca caaactattt ccaaaacttt ttcattatcc caaacagaaa     300
ctttaatcat taaacaataa ttatccattt ctccactctg caacctggcc cctagcaacc     360
tctattccac tttctgtccc tatgaatttg ccaattctat atacttcaaa aaagtataat     420
catacaatat ctgtcctttt cagtttggct tacttcactt atcataaggt tttcaatgtt     480
catttacata gcatgaataa ggatgtcatt ccttttatg gtggaataat atcccattgg      540
atgaatatac cactttttgg gcttttgtta tttttcattg acatatgata atcatgtggc     600
tggtgtctgc aatcccagca ctttgggaat ctcaggaggg gggatccctt gagcccagga     660
gtttgaaacc agcctgggca acacagcaag atctcatctc tacaagtaat ttaaaaaatt     720
aggccaggtg cagtggctca cgcctgtaat cctagcactt tgggaggcgg aagcaggcag     780
atgacctgat gtcaggagtt aagagaccag cctggccaac atggtgaagc cccgtctcta     840
ctaaaaatac aaaaatcagc tgggtgtggt ggcgcacgcc tgtaatccca gctactcagg     900
aggctgaggc aggagaatcg ctggaacctg ggaggcagag gctgcagtga gctgagatca     960
caccactgca ctccagcctc agcaacagtg ccagatatct caaaaaaaaa aaaaaaaaa    1020
aaaattagg caggtgtggc acatgcctct agtctcaact actcaggaga ctgaggcaag    1080
agactcgctt gagctcagga ggttgagggt gtagtgagcc atgatcgtgc cactgcactc    1140
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866

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tagcctgggt gacagaatga gagcccatca cacacaaaaa aaattgcaca tatttatgga    1200
gtacagtgtg atatttcgat aacatggata caacgtataa caatcaaatc agggtaatta    1260
gcatattaat actctcaagg atttatcact tctttatggt tgagaagact caaaatccat    1320
tcttccagct aatttgaaaa tataaaatga attgttaatt atagtcagtc tatagtacta    1380
ttgaacacta gtaacttatc cttcctatct aactataaac atatagatgg tcaataggca    1440
tatgataaaa tgctcaacat aactataaac ttcagggaaa tgcaaatcaa attttaaaaa    1500
aatttttact gttggccagg cgtggtggct catgcctgta atcccagcac tttggacagc    1560
cgaggcgggc ggatcatgag gtcaggagat cgagaccatc ctggctaacc cagtgacccc    1620
ccgtctctac taaaaataca aaaaaaaaaa aaagaaaaaa attaaaaaaa aaaaaaaaaa    1680
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa                     1725
```

<210> 1488
<211> 903
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (302)
<223> n equals a,t,g, or c

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<400> 1488
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cttggtggca gtgaacttcc tgctgcagaa gtgggtgtga ccccagtgct ggagaatggg    120
ctgtgagccg agtttcccgc acctgcatga gtgagcgcca tggtccttct ccacagagcg    180
tcctgctgtc actttggttt gtgttaactt tgacgccttt cttgtttctt actctgcttt    240
cctgcatgga gcacacagcc ccggctccct ttcagtctgc atggcagaca cctggcctct    300
rnaggtccag ttcattctgt gtcccctttc ggtcgtccct atgttccgtc aggtgattga    360
gggtgaaggt cggccttggc agcccagtgg aaagtccctt gactcctggc cgtcagtggc    420
agtctccagc ctttgggarg aggaaacttc tatttaacaa graatggaat tgactttgcc    480
acamacagcc agagcgatga tttgtagagc caacctgctg agacattcaa agcatcagtc    540
gtagggtcag gaccgccagg tgaggtgtgg ctccacctgc agcagcctgg ggcaggttgc    600
ctagcctctg gctttagcat cccttctgt gaaatgggga aagtgatggg acctggattt    660
gtagggtggt tgtgaggacc tacagggtt tttgcaaaat acttagccca gggctgacta    720
aaagattcag agacgctggg catggtggca cacacctgta gttccaggta ctcgagaggc    780
cgaggcggga ggatcacttg agcccaggaa ttaaagtcca gcctgggcaa catagtgaga    840
ccttatttct taataaaaaa aaaaggaatt cgatatcaag cttatcgata ccgtcgacct    900
cga                                                                    903
```

<210> 1489
<211> 1773
<212> DNA
<213> Homo sapiens

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<400> 1489
cagagaaagg aaaaaattct tagcacagta cttattacaa tctgatttct tttcttgtt      60
tttctgtcac cttttactag gatgtatgct ccatgagagc agagcttcat ggtcttgttt    120
gcctctctgc tgtctccaca atgactgcag cagtgtctgg cacagagatg ccaaacattt    180
gctaaaggaa tgagtaggga atcaggttct gttttgtctt acacccccca gtgcctacca    240
ctgtgcttgg cccataacaa gtgcccagaa actggtgggt actctgaggc cactctgaat    300
ataattgcta ttggtagatc tgtgttctca tcctagaatt tagaatggga aagcggttta    360
gaactaagag tctttcaagt gtttcgagcc aaactgcaaa gcttttagaa tattgtctct    420
gcagcctgaa actgactatt acacaggttc ccccagttcc cattcaagag cgaagtctag    480
atgtttagaa ttctatgcct aaatagcaga acggaagcct cattttattt tgattaaatt    540
cctatttttaa tacatacatt gcatcagtca gtgagtcagt gagtatttat tgagcccctt    600
caggatacaa agtagtgctc tggtagagct attgagtttg aaatattagt cacattttta    660
aaccaaaacc aaatccccaa gtagttgaaa gtgctgttca aattgtcaga gtgcagttcc    720
tgtagactgt attttgtgag atgggctttt actttatatg ttcccacttg ggcaggaaca    780
aaagtttggt aaattactga ggtattacat tttaccaaaa tgaaattttg aagtgatcct    840
tcatcattag ctttcttcct gtccaattgt tgagggagtg tgtgataatt acagcatctt    900
ttgagtaatt taagattttg ggatcttgtg ctgccaggac agggtaaaga ataacacttg    960
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867

```
ccttcactct ttgacactag tgttcaaatt gggcagggaa agaaggggta ttattgttgc    1020
ctcccagatc ccaactctat ccaaagtact gtctccttta cttctgtgag ctgacagggt    1080
tgcagaaaca cataaaatcc tagactatct tgacatcacc aaccgtagag tttgtgaagg    1140
taacgtgtcc tctacaaatt ctcatttgtt ttcattgttt gttactcttt tttgttcaga    1200
tttctctgtt gacttctgca gtgaaccacc tcaaagccaa tgttaagtca gctgcagact    1260
tgattagcct gcctaccact gtagagggac ttcagaaggt aggtgccatg tgtgggtaca    1320
gagacttcag aaggtaggtg ccatgtgtgg gtactatttg ccataattct agcttcttat    1380
aagttttcat tgaaagccta gcatttgaaa tcagctgctc caagagggca gtaatggagt    1440
gtatcactgt gtcctaaaga attcagaaca attttgtttt ggtctggtta gttaggcctt    1500
taatttgcaa caggttacct cagctgtgat ttatatgggt tcataccttt ttatttggct    1560
ctctgagtcc cagaattgct ctgctggcac tcttgtgtta gcatatatgg gttcgctttt    1620
cagcttgctt tttcagttca ccactcacaa tatcttcatc aaagcagacc aattgtacat    1680
gatagttacc ctaaatctct gttactttcc ataattaaga aagttaaaaa aaaggaattc    1740
                                                                     1773
gatatcaagc ttatcgatac cgtcgacctc gag
```

<210> 1490
<211> 2218
<212> DNA
<213> Homo sapiens

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<400> 1490
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atattttaca ggcaaaaaga atgattcctc agcagtcatt gtgaaatttt gtgggccaca    180
agtattgtgc acacatgatc cttgatttag agtcaacctg atgtccatta tagctgtgga    240
aaggcagcag gcagttgtgt cgctcttcac aataaggaac acatcttgct ttcagcatgt    300
gagaggaaca aaagcattga tgtaaatgtg cctcaaagtg agaactgaaa acattaacat    360
aaaataaaaa agtcaaataa gactaagttc ttacaactac ctataaaaat tgaattatta    420
caactaaagc agcaaatcaa aacatctgct gaggttttct ggtagaacaa caacaaaatt    480
agttggtgcc catgttcagt aagtcactac cattgacaaa actaaatcca aaataggaaa    540
ttgaaaagtg cataatgaaa ttaaatcttg tatcaagtat ttgtggaaaa ctggaaatgt    600
ttctctggta tggttggtga atgatgattt ggaggaggta ttaaagttta tccgatccag    660
ctttggcctg gtgttccacg tagaaaagga tgtaggcctt cgccttcacc acagtctcct    720
cgtcagtcag tgttacagta ctgtcattga agtggaacca gcggccttcg tgagttgcgt    780
atgctgtgta atgtccagaa ccaaccccgg aaccatggtg caccaccaca gcggcgaggt    840
catacaggca gctctccggg ccactgttct caggctctag taagtagcat ttcatgtcta    900
ggcctctcag tggaaattct acgtatgtat caactttatt tcttaaatat gctgtccaat    960
gaaatctttt caaatgtaag catagcacct tgggtagttt ttgaatccaa aacttttttg    1020
tggacttttg tttctttttg catttatggc acatatataa ctctgtctca tcaagttctt    1080
ctaagtcggt aaaactgcga agacaatctc gtaacgaaca aactggtcca tttttcttgat   1140
tcttagagcg cttacttctg aactgacttg gaatatctaa tgaaaggtct aggaatggat    1200
caaactttct agattctgtc ccacatatga ggcagttaac ctcattttgg agaatgcctc    1260
cgaatatagc cgtgacaaca gtagatgctc catttatgca acacttgtta cttgcagaca    1320
gagtagaatt ctcctgcaga attgctgagc gggaaacacc gttgaaaccg ccctgaagtt    1380
ccaagtgtag gtggtccaaa aggtagcgca tgaattcatg ggcgtcctgc tgttgatagc    1440
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gaaggatggc attcatgaaa catgtgttcc ccaaattccg aaggcctgtg gcacaaatgg    1740
cagtggtgct cccatttact tttaataact tgctgtttag tgttgagttt tccaaaagtt    1800
ttctttcttt atgcctgtca gctgtgaaag ctgagttttc caagttctgt aagtgttctc    1860
tgactttctg taccagtccc agcttggtgt cattaaccac aaaatcatca cagcgataac    1920
agtatgtact gtagctactg caatccatac atactgtgtg ctgaacttta tcttgctttt    1980
ctgatttctt atggttggtt aaaggtactt gtgcatcttc ataatgtttt tttgcatggc    2040
cattcacata cctctcaaaa tctaggagag gaatctgtct cttcaactgc agaatttaag    2100
tgcttctact tttcttcttt tttaaaaaaa agttatctgt acaaagtatt ttcaggttcc    2160
ccaaatcctt ccacagtgga cacttgaaca agtcaaacag acccaagcgg acgcgtgg      2218
```

<210> 1491
<211> 1119
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868

<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1075)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1077)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1094)
<223> n equals a,t,g, or c

<400> 1491
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gccaaaaaga aattcaggaa tttaactagg aaaactgaat ctgccctcac tgaagactga   120
ccgtgctctg aaatctgctg gccttgttca ttttagtaac ggttcctgaa ttctcttaaa   180
ttctttgaga tccaaagatg gcctcttcag tgacaacaat ctccctgcta cttcttgcat   240
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ttcagatact ctctttgcca gatgaagtta tttgctaact ccagaaattc ctgcagacat   360
cctactcggc cagcggttta cctgatagat tcggtaatac tatcaagaga agagcctagg   420
agcacagcga gggaatgaac cttacttgca ctttatgtat acttcctgat ttgaaaggag   480
gaggtttgaa aagaaaaaaa tggaggtggt agatgccaca gagaggcatc acggaagcct   540
taacagcagg aaacagagaa atttgtgtca tctgaacaat ttccagatgt tcttaatcca   600
gggctgttgg ggtttctgga gaattatcac aacctaatga cattaatacc tctagaaagg   660
gctgctgtca tagtgaacaa tttataagtg tcccatgggg cagacactcc ttttttccca   720
gtcctgcaac ctggattttc tgcctcagct ccattttgct gaaaataatg actttctgaa   780
taaagatggc aacacaattt tttctccatt ttcagttctt acctgggaac ctaattcccc   840
agaagctaaa aaactagaca ttagttgttt tggttgcttt gttggaatgg aatttaaatt   900
taaatgaaag graaaatata tccctggtag ttttgkgtta accackgata actgtggaaa   960
gagctaggtc tactgatata caataaacat gtgtgcatct tgaacaattt gagagggggag 1020
gtggagttgg aaatgtgggt gttcctgttt ttttttttt tttttttttt ttagntntcc   1080
ttttaatga gctnacccttt taacacaaaa aaagcaggg   1119
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<210> 1492
<211> 1955
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1106)
<223> n equals a,t,g, or c

<400> 1492
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gtaattttaa aattttcaag tagccacata ataaaggaaa caggtgaaat ttaatgacat   60
atttcctta atacggtata tccaaaatat tattatgtca acctataatc agtataaaaa   120
cctgttactg aaatatttta tagggcccat ctcagttcag actagccaca tttaagtgct   180
tcatagccac atgtggctca tggccatcca tatttggaca atgtacttta gactattgca   240
tctgtatact cttgtgccgt cagctggggg gtggggtgtg tgtgcgtgta taccaaggca   300
gtgagcatct gagctttgaa cctcaaagac caaaatgccc tgcccatttt cctgcttatc   360
agctgaggaa tctttaccca cattgacaca tgggcttgtt ctgacccaag tgcatgcagg   420
cttccagagc agattcagag gcctaactta gtcctttagc tttcctccca gcacagaact   480
cccaaggtta tctgcaagta ggccttgcct agagagactg agttttcaag ttgtcagttt   540
tcccaaattg tcctcaagca tcttcctctg gaatcacctt actgtttagt aaacattcag   600
aggacttgct acacatctgg gcagtctgca ttgtaattca tatgtgttta cacatttgtg   660
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869

```
tcttcatctg ctaaagcacc tttgaaccat attgtaattc ataatatctg aagcaattat    720
tatgaattgt agtaattcat aatattgaag cgattcataa tatctgaagc aatccccaga    780
tacgggttag gcatggccct gctctgagca ggatggcaaa agtggcagtc cgtgacgcag    840
cccttgttac cccaggctat tactaaatgg tggtggtggt tttatcttaa ttaaaatgac    900
atcaccaaca atgggccctt tcctgtctgc caggaaaagt tttctgtagt gacgcacgtg    960
ttgtgtgtgt atgtgtgcgt ttgaggctat attactcatt gctacggcag ttcaaaatga   1020
cttggaaaaa aacaatgaac gctggtcatt gatatgtata ctgacatgtt taagggaagt   1080
tactgtggtc tgtaacttat gaaatncatw aaaatatgat gggtggagtg acggacacat   1140
ggacagatat gaagcaagca ctgtaaaata ttagtggtag tttttgtatg cccatactca   1200
cggcaccatt attcacagta gctaagagat ggaagcaata tgtgcccatc agtgggtgaa   1260
tgatcaacaa aatgtggtat attcatacag tggaatatta ttcagcctct aaaaggaaga   1320
tacgctgaca tgtgctgcaa catggatgaa tcttgaggac atgatgctaa gtgaagtaag   1380
ccagtcactg gaagmcaaat actctatgct yccatttatg tgaagtatct agagcagtca   1440
aatgcataga aacaagtaga atggtagttg ccaaggmctg ggggaggagg aaatgaggag   1500
ttgtttaatg ggtatagtgk ttcagttttg caagataaaa agtcctgtgg attggttgca   1560
cagttaagtt atgtgaatgc tgtatgccaa ctcaactgtc actctaaaat ggttaagatg   1620
gtaaatctta tctttatttt accacagttt tttttaaagc atggtaaaca ccatttccca   1680
ggatgtaaat cggtactaaa aaaaaagtgc tccaaagtaa gatatatttg ggaaacacag   1740
ggataactaa ggttagatag gtgttcttta ttgcaggaat tctaagagca tttaacaaat   1800
taatttacac tgggaatttt cagtgtggag ggtctggctc atagcatttc acaaacatta   1860
tacttcagag tcccaaagcc tttaaataaa atgttaatgg tagaaactca aaaaaaaaaa   1920
                                                                    1955
aaaaaaaaaa aaaaaaaaaa aaaagggcg gccgc
```

<210> 1493
<211> 1528
<212> DNA
<213> Homo sapiens

<400> 1493
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aattcccggg tcgacccacg cgtccgcatg attacactaa tgcattccag ccttggcagc     60
agatcaagac cctgtctcaa aaaaataaat aaaaataaaa taattgctgt gaaatttcta    120
ttaacgtttt tgggaaaacc agaggcttct gtgtgacatg tgaatcacag aggagaaatc    180
atgaatcttt atagccttgt gttaacatga cttccttttg ttgatagagt ggtttattag    240
tctcaagacc tttgaaatgg cacatgaatt gcttggacag attatggaga catccaccct    300
tctttagaga tttaagtaag tagaaccagt tagtgtgcct cttctgtttc tcaccttgct    360
caatgcagaa tgaacttggt gtatatccac cagaagcacc tgcttatcta ctgtttgctg    420
tcgttgcagg tatctgttga gattagctgt aacgagttgt atgtaatttt ataactaact    480
gaattaagaa aagcctttgt aagattcagt atctgcttca ggtcattgaa atgtaaaatt    540
agaaagtaag ctgagggcag gggatttttt tctgttttat tccatttatt ccctcaccac    600
ctttgccatc caccaccaac agtttctttt aaatttagca tccagagtag acctttgaca    660
acgcaaatca gatcacttca tttgttcatt aaaaaccttc aacaggtttc acattattct    720
taggattata tttaacatcc ttatacagta atctccaagc ctctccttga tctggtaccc    780
tctttccatc tctaatctct tctttaacac tcctatactt acttactcag ccccaggcac    840
attggcatat ttgctgttgc ctgaacatgc aaattccttg aacttgctgt ttccttgcct    900
gaaactctct ttcctcagat atctgcctgg ccttcctctt aacctccaag tcttgtctca    960
aatatcattt tttcagtgag gccttgcttg gccagccctt tccctcacta tatcctgctc   1020
cccaacaatt gatttttact tatccatata actttatcc ccctgtgtgc tatatatttt   1080
acttatttct tggttcattg gctgtctcca ccaaaatgta agtgccatga ggacaggaat   1140
tttattaata tcagtttgtt catttctata cctttagtgc tttaaacagt atttagcaca   1200
cagtaagcat tcaattaaat atgtattgga ctgggcacag tggctcatgc ctgtaatccc   1260
agcactttga gaggccgagg caggtggatc acctgaggtc aggagttcaa gaccagtctg   1320
gccagcaggg tgaaacccca tttctactaa agagaccaaa atcagccagt catggtggca   1380
tgtgcctgta gtcccagcta ctcggtaggc tgaggcagga agatcgctag aatccaggag   1440
gcagaggttg cagtgagtcg agatcaggcc attgcactcc agcctgggtg acagagcaag   1500
                                                                    1528
actctgtctt caaaaaaaaa aaaaaaaa
```

<210> 1494
<211> 2069
<212> DNA
<213> Homo sapiens

<400> 1494
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ccacgcgtcc gcctcgtgct catcagagca tgccaatcct aagccattgg acatatgtag    60
actggttttt gttgttgcta tgtacatata aatatatata taaaatgaac atagttcatg   120
ctttcagata aaatgagtag atgtatattt agattaattt ttttagtcag aacttcatga   180
aatccacacc aaaggaaagg taaactgaaa tttcccttgg acatatgtga aatctttttg   240
tctttatagt gaaacaaagc cagagcatct ttgtatattg caatatactt gaaaaaaatg   300
aatgtatttt tttctccaaa gaacagcatg tttcactcaa tggtgaaaag gtggaaacat   360
ttatgtaact ttatgtgtat ctgtcttgat atctactgac attgtctata tgaggaaaat   420
gattactggt catgctcctg tgagtttttt gggaaggtag ggtcatttct ccctgcctgc   480
tttgtgccaa ctagcatgtt gcatctacat gcattatgag tctggttagg cattacttta   540
aacatacata aagagacagt aggacattgt ggctgagtct acccagctca aggtaaagga   600
gaatgttgct aatttttag caaactagac cagcattatt actcaaacta aaaatatcac   660
acctgaaaaa tttaatttag gacctaaaat gtctagatta gctttctgct ttttttattt   720
gaataactca ttcagttgtg aatgaattcc tctttatttg gtgccacagt caccaaatga   780
caaggatttg ccactttccc accaaattgt gagtgcttgt aatttaggtc tctctacctt   840
aaattcagta taaggaaacg taattatgat tgattttttc caaagatgac aagctgtgtt   900
gaaatacatt ttttctttg accaattgac agaatctaat aagctttaat aatcttcccc   960
ttttatgtga aaagttttga gaactgtgaa atgtttagga acaaactgtt gaaatccatt  1020
ggaagggaaa aaagaaagtg gtaccagtgt taccagctca actaaaacct gcaattctgc  1080
atttcaactc ttcacttcct cagcctacaa atagctcatt agatgacatt cacgcatgct  1140
gggtataggc aaggaaagta attttcaaag tacatttgca gttctctttt tcagagatga  1200
ttctatgata gtgcctctga aagttgatgc agcatttttg cctttccaaa aagtatttat  1260
cctcactgct tttgcagta cttgtatttt cacagatgga ttatctgggg taattttctt  1320
caaagggagt ttgttataca cagtgaaaat gtattataga gtagaatagt aaagctctag  1380
gggtttcaga aagctttgat gaacagatga caaacatctg aaaccccctc cgcactgtta  1440
cccagtgtgt atataatgac ttgttatagc tcagtgtgcc cttgaatcca tacagtttct  1500
taaaagacaa taaaatctta ttaataaagt taatgtaact tctaagttct agaaaatgct  1560
gattctgtct gccccattca attgggggct actaattgat ttgttgcttg gatttcctga  1620
gaatttctct atttgtagga ggggtttttt ctttttacgg tctgttgatg acaattactt  1680
tatgggtgtg atgcaccgat ggtagccaag gaatctgttg gggaagttcg gaaagaaacc  1740
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agagttatat tatggtgttc agagattaag ctgacttgga tacaatattt tcttttgaaa  1860
atgaatttc ttttcattt gtgattttta aaaaatgttg caccagttat gcttcatgca  1920
tcgttacatc ttcatcaggt taatgtaatg tctagttcct ttgcaataaa tatattgctg  1980
caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  2040
aaaaaaaaaa aaaaaaaaaa aaaaaaaaa                                     2069
```

<210> 1495
<211> 1528
<212> DNA
<213> Homo sapiens

<400> 1495
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caggccaaga aatgatcata ccccttgcca aaggtaaaaa aaaaaaaaaa aaaaatgagt    60
tgaaaattga agtgacctct ttccagctga cttgcaggct tattttgtaa ccttttcctca   120
tccagttttc cctgagaacc tgggtttatc tctagatagc tgttcaggtt ttttagctga   180
ggggtaagta tcctagctga gagttttgca tctttgggct gggtttgcag tggttgtgtt   240
ttgcataaaa tgtctagtct ttgccacaga tagtgagcta cccactaatg agcccatggt   300
tttatttcag aagcacatga gggtgtgaaa ccactctgtt acctttctgt attgtcttag   360
ctattcaagc cagtcagagg ataatatata tattctcatc agcactcaga gtagtcagtg   420
aagagagtag atcacacttg ggcacaccag gattcacata aacattgtat cttctctgtg   480
gatgctcagg ccttgtctac aatgaggctt tacaaccttc ctttgttttg gctcgggatt   540
acttcctggc tgtctaataa ttgaaccata accatgtaat attatgtaaa ggcctggaaa   600
ttactgttgc taaaaaaagt catgtagttt catgtagtgt agcatccttg gcatcgtttt   660
ccaaaatttg ttccttctcc cttttttttt tctttcgtgt gtggcatgag tgtgtatctg   720
tgtaaatatg attgtatatg tgttactccg atatgtaatc catttcactg gctgagtttg   780
gcccctagcc atgtgttaat ataagtagg catggcttcc caatggaaat ctctgagaat   840
gacagtggag ttgtgcaagc attttacatt gccacataat tgacttgcca ttttatggtt   900
aaaaacggca cattaggcag ttgaatatga cgttaccttg cagactaaaa ggttgaaggc   960
ccgaaactaa cttttagcta acaataaggg ctgtgcccca atggaaactg agttcatttt  1020
ctgagaaagg tttggatgac tgaaatattt cctctacagt caaggacttt ggcatgyggt  1080
```

```
ggctgaaact gagctttttt gtgtgggctc cagttctcac tgttctgcaa tgctcatggc    1140
aagttgaatg gtgagctagc ttataaatta aagagctctg aactgtattc agaccgactg    1200
ggtatctagc ttactgtttt aacatcattg ttgaaaccag accctgtagt ccagtggtgc    1260
tgccctgttg tgcaaactgc tccttttcct cgtgttttg taaagagctt ccatctgggc     1320
tggacccagt tcttgcacat acaagacacc gctgcagtca gctaggacct ttccgccatg    1380
tattctattc tgtagtaaag catttccatc aacaatgcct aattgtatct gttattttg     1440
gtttaacaca cactgattca tactaataaa tattttcagt tttaaaaaaa aaaaaaaaa     1500
aaaaaaaaaa aaaaaaaaaa aactcgag                                       1528
```

<210> 1496
<211> 1751
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1741)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1742)
<223> n equals a,t,g, or c

<400> 1496
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aattcccggg tcgacccacg cgtccgacaa ctttttcttta gaaccacatt attggtcata     60
atccttgtta ctgtcatgag gattgttgca tgggttaaac acaaacacag actagcaatg    120
cacttgaaca aacctggtgg tctttggaaa taaatcacca ttagatttca cctggttatg    180
ctgcatccca taagttccaa atgaatcacc tgcttatcct attaacgaag catttaattc    240
acacacaaat gcttgaattt cccctgtata aatgtagtca tgcgattcaa cttttctaat    300
aagatttgtg aatgctgcat catgatgaaa atgtggatta actgtgggtt gcatgcctgt    360
tgttcatact tcagtgatgg tcacacacaa aacaagatga gttttactta ggtgaaacat    420
tattaaactg tactaacaat acagaaacat attctctttg tcgcttttta tcaccaaaac    480
tgaatggcaa atatgtcttg acattacttg gatgaactgt ggctagcaaa atggaattaa    540
cttagccact ataatttttt aaaacattaa agtttctaaa ttgtttttgg gggccgagta    600
acgcagagtc aataaaggtg gttatattgt aagctttag atggtgctta agaattctta    660
tctttttaaa tagcagtatt ttttttttaa gaataaattg taaggagcaa ataaggcaga    720
atgccactct accctcaggt caattttatg gtatatgaaa atgccagtaa tatttgtgcc    780
acttgccaac tcgggggagg aggggctttt cccttactgg atactttgt tatagtttga    840
ctatgtcatt atgttgttta gagagcctcc acaatgagaa gttgccactg cagggctaac    900
tcgccttcag aaataatcag aatgattcaa gggtcaaacc actttcatcc cttaaaatat    960
agggactaat atttctttt ctttttttta aaaaaaacat ttcttctgtg gcttagaaat    1020
gtgccagtgt gttcaaaaca tttacaccaa tttcaccaga tttaggacct attaaaaatt    1080
caaacaagtt tctttttttt tttttttttc tgtgtaacag ggatttttaa ataacggact    1140
atatgcattc ttttgttatt tcacacttca gttaaagtga taacaatggt aaactgtgat    1200
cattatcaga ctgactgaat gctttctgat ttccagtgag tgatctagtt ctacgtatta    1260
cacaggtgta atatctgtga gtgtaaataa ctggaactgt acactgatta acatgacagt    1320
ttctcttttg ttgttcttat ctgtactgta ttatagtatg tgggtataaa tatctacaag    1380
tatacacaca tatgtacttg tattccacta ttgtaacctg aaagaaagac tatgtattcc    1440
cttttttaat tccgtactgg tatttgtgtt atttaaaaag caaaattctg ctctatttag    1500
ttgtataata ttagaggata ctttgctgtg cacaattcca agtgccttag aacattgttt    1560
agctttccta agtatatata aatgcatata tgtataaaat tgggaaaagt tacctcaata    1620
aaatcattgg gaaatcccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1680
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1740
nnaaaaaggg c                                                        1751
```

<210> 1497
<211> 752
<212> DNA
<213> Homo sapiens

872

<400> 1497

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tcgacccacg cgtccgggac cttaagaaca acttgctagg ttcgctgcgg atggcctgga      60
agtctttttac cagagctcca taccctgcct tacaagcttc agaaacacca gaagaaactg     120
aagcagaacc tgaatcaact tcagagaagc ctagtgatgt taacacagaa gagacctctg     180
tggcagttaa agaagaagtc ctgcctatca atgtggggat gctgaatgga ggccaacgca     240
ttgactatgt gctacaggag aagcctattg aaagttttaa tgagtattta tttgctttac     300
aaagccatct atgctactgg gagtctgaag atacagtatt gctcgtcctc aaagagatct     360
accaaaccca gggtatcttc cttgatcagc ctttacagta aaaatgaccc atctatgggc     420
tggcttaata cggacattga ggggatcctt ccccagaaaa tccacctgtt tgttgctggc     480
aattttcctc tcctcagctg cgtcatttcc tttttgttgc ttgccactac tcaccactgg     540
ggtctttgga agataatctt cctctttgga aatgaatgga aaagcaaaag gccctattac     600
ttttaaccac tggcttcata taaacacttg ccattttttt ctgcaaaaaa aaaaaaaaaa     660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     720
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa                                   752
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<210> 1498
<211> 629
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (38)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (41)
<223> n equals a,t,g, or c

<400> 1498

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tngaggtacg cctgcaggta ccggtccgga attcccgngt ngacccacgc gtccgctcga      60
agttgtaatc tctagggaga catttatagc atcttctttg acttcagcat gtgaaagagt     120
aaggaaggat agtccaggcc aaggaatcaa cttttgcagg gaagggaatt ttgtagggta     180
gtcagaggcc agtgtgtcat tctctgtggt tacagtgtac tgtaggtggt gcgaggtgac     240
ataagcaaaa gtgcctggag cttagtgggt gatgactaaa tcagtattct tttcctttct     300
ttccctttcc ctaagcctcg gctgatgctt ctctgtcaaa tcaggttcat tgtcagcctg     360
ctgggttttt ttttttttta gtatatcgac tatagttaag acttcaattt ttccaattag     420
tattttaaat tatataataa ttaaattcat cctgttaaaa aattaaccct tgtaaaaatg     480
attattcttc tctccagaat gaagtgctgt tacatttttc ttacatatcc ttcagaaaga     540
cttctgtata tataaatgtc catatgtttt cttcttttca aaataaatca tattataaat     600
taaaaaaaaa aaaaaaaaag ggcggccgc                                       629
```

<210> 1499
<211> 809
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (727)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (738)
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<223> n equals a,t,g, or c

<400> 1499
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cccacgcgtc cggtggatca gcattttaga aactacaaat ataggtttga ttcaacactt    60
aagtctcaga ctgtatttct tgcgggaaga gggggactaa actcaaccta acacattaaa   120
tgtggaagga aaatatttca tttagctttt ttattaaaat acaagtaata ttattacttt   180
atgaacaatt tttttaatt ggccatgtcg ccaaaaatac agcctatagt aaatgtgttt    240
cttgctgcca tgatgtatat ccatataaca attcagtaac aaaggtttaa agtttgaaga   300
ttattttta aaaggtaaa tggttaaatt ttacatgaca gatattttat ctattggcct     360
gttccccaaa tggccatttt aaaatgcttg ggtacacttc tcttaagtgg tctagtcaag   420
gaacctcaag tcatgctttt gctatcacca atcataatgt acccatcttt aatttatatc   480
aggtgtataa atgtacattt ccaaatgaac ttgcacttgt tatattataa ttggaagtgc   540
agtcagcaga tgctgttgtg aagctaatgt cacaattatg tgcaaggtg tgcttcctgc    600
tgtatgtgag ctgtaaaaat gttacgtgaa gaaataaatg aaacttggcc aaaaaaaaaa   660
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    720
aaaaaanaaa aaaaaaanaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   780
aaaaaaaaaa aaaaaaaaaa aaaaaaaaa                                     809
```

<210> 1500
<211> 1208
<212> DNA
<213> Homo sapiens

<400> 1500
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tccacaatat cagcatttaa gtttaagcaa gtttttttat ttctagaaga catttttacta  180
ggcaaggaat gataagaatc cctgtgtata ttctctatta agctttaatt gtgaaaaagg    240
atttgtaggg ctagtcttgg gctgtggcca atctggtatg cttcctgtgt ctgtatggtt    300
tgtgctgtaa gcctccatct gttttacaca tcctggggac atggcccaca actgcttgac    360
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ttttcctact cctgtctctt aaagggcccc acccagcgac tggatttct tctgcctctc    480
tgtgtgggta ctgtgtgtga tatctgtaaa aagtgcgcta attaatttgg cctaaagaaa    540
gacaagaact tggatcaaat ttttttttaag ggaagttaaa agctgtggta tctttcagtt   600
cacatgactt taatctctga gtgtttgag gttaaaaact gctttttggg ttttgagaac     660
tatttgactt gaaggcttca caattggtaa ggcctgggga catatggaaa taaccacgct   720
cttaattatg ctgggagtca aaccttggct gcacctagca cacaattaaa caacttacca   780
agtttttacc ttaaaagtta aaaattgcta ggagttacta ttccgagatg taattgagac   840
tacaggaaat agatttatat gcaagatgtg taagaacagt aaaatgtggt gtttttttgt   900
aaaatattat aagaaggcat ggaaatgtat acttttgctt agggttaaag gattgtttaa  960
attaggaaaa agctgaaggt tcaaacaagt ggtggagaat tgtggaaatt aatcttgcag  1020
aagaggttca acatattaac taaattcaaa agggttataa ggttataaaa ggtttttgct  1080
tctttgaaat ttctgagtca tccttttggc aaaataaata acttaatggc aaaaaaaaaa  1140
aaaaaagg                                                          1200
                                                                  1208
```

<210> 1501
<211> 2141
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (644)
<223> n equals a,t,g, or c

<400> 1501
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aaaaaaaaaa aaaaccccaa aaactgttac tactaggttg gagtagccta aggcagtagg    60
gcaaggaggt gggcccaggc tggtctgtgg ggagctggag aatggtgact cgagtgacca   120
gtggacaggc aggacccagg ccagcattac aagcggggat gtcaggcagg agcaggggag   180
yttctcgctt ggcagctggt ttatggtaca cttttgaaaa gtaagctccc agggcctggc   240
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```
cctcacatgc tcagtgaata tttgactgaa gggtcccctc atagcttggg agtattcaca   300
ggcctaaatg ttagttatac tattagctaa gcctggtcct ttgttacgaa atttaaaaat   360
gaaattgcaa cattcttgtg gaaattcaaa gacatcattt tctttcaaca aattcacaca   420
ttcrttcatg cttcttctat accttttacc cctaaagtca tccactcctg agttcctcct   480
gctggtttcc caaactgcgc aatgactgcc ccatcatagg cagtggtccg tggagtcggc   540
ctcactttcg cctttccccg catctacttg tttccaaggc cagtggtact taactgggtc   600
aagttgcctg tgggaccttc agggaacaga attgccatgt tccntcactg cctgcaggga   660
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aacgaggaaa cttagtgaaa tatttcagag cttctagatg tgaggtacaa aacttgggat  1020
caaatggaat cttgattcac taaccaattt aagatctgac ttctaatttt aggaactttg  1080
ggttatgaac gcttccattt tatacctgtg tctagttagt ttctgcctat ctatccaaga  1140
agcttttatc aagggtccac catgtgccag ccactgaagt agatataaat ataaggatgt  1200
gtaaggtatg gatgatggta tacgaactgt catcttactg gatttgtccg ctctgttaaa  1260
gatacggttc cgaaaacttt ttaaagccct agagagggct ttaaggcaat gtagcatcat  1320
atatagaggc atcaacctgt tcatatcttt ctatttaaca gaactgtgca cctgggcaca  1380
agggtgtgca caacaggatg tgtacagcag cactgttaaa gtgtagcaca tccatactac  1440
aggatcttat gcaactgttg gaaagaatga agcgatgctg cactgtggtc atgcagtgat  1500
ctctaagaca tattaactag aaagcmaaag gttwacaatg tatagcagct gggcgcagtg  1560
actcgcgcct gtaatcccag cactttkgga rgctgagtag gcggatcacc tgaggtcagg  1620
agtttgagac caacctggcc aatgtggcga aacgctgtct ctactaaaac tacaaaaatt  1680
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gcttttcccc agtttttttt tgctgtgtta cctctgaagg gaattgaggt agaggggaga  1980
gttagaagga atattcggct tttctatttt atatcctcct aggtgaaatt tttacaacaa  2040
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<210> 1502
<211> 1118
<212> DNA
<213> Homo sapiens

<400> 1502

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gcggccaggc aacgccctga gggtggccac gctgccaggt gttccactcc cccgggacta   180
tgggcaaggg cccggggcgg ggaggcggc aggtgctgac actggagctg cgccggagtc   240
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cttccctggg ccccgcggcg agggcatcgg ctctcgccgg cggatgacga gctgtatcag   540
cggacgcgca tctctctgct gcaacgcgag gccgctcagg caatgtacat cgacagctac   600
aacagccgcg gcttcatgat aaacggaaac cgcgtgctcg gcccctgcgc tctgctcccg   660
cactcggtgg tgctggagcc ccggatagag atcgtggtgg tggggactgg agaccggacc   720
gagaggctgc agtcccaggt gcttcaagcc atgaggcagc ggggcattgc tgtggaagtg   780
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caatgaaccg ccaggaactg acctgctgac tgcactctgc caggcttccc aatgctttca   960
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                                                                  1118
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<210> 1503
<211> 1769
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<212> DNA
<213> Homo sapiens

<400> 1503
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agtgatcctc aagccgaaca gctgctggaa gagcaggtgc cctgtggaac ggcacatgag   180
aagggcgtcc ccaaggccag aagtgaggct gcagaggctg gaaatggcgc cgagacaatg   240
gcagcagagg cagaaagtgc ccaaaccaga gttgctcctg ccccagctgc cgcggatgct   300
gaagtggaac aaactgatgc agagtctaaa gacgctgttc ccacagaatg atgctcattt   360
ccctgttcca gggaaggcgt tgggatgatg gatgcgttgg tctttctccc ttggtttgta   420
agcagtacaa gggcgtgtgc tcccagaata tgctgtaatc taattttggt gaagagaccc   480
agcgtttcct cctgagcagt gcctctcacg gcttgtctca tgcagtcgtg tggcttcttg   540
cccaggtttc aaagctgaag tacattgtcc ttagcggctg taacatgtct cttgacagta   600
gtgcacttgg aataataaag gttgggtgat tatatcttga tgatacatta cttgttcaat   660
acagccactg atggaatgct tcctttttta ttttttcct taatttttt ttttatttgg   720
ttgggaacag ctgaatacta ggaatatatc ttgctctata gaggattttt ttttgtatgt   780
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agttactacc actcaaatgt atttacaaag agaatttggc caggcacggt gatgcatacc   1140
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ttccctgtgg cctttttgaac tgtacatctc acatgttggg aaacgctggc cactgggaaa   1560
tcattagaaa ggaggctgta gaatatttgc cgagcctcta ctgtatacca ggggctaact   1620
caccaagcac attctaggaa ttgggccctg ctcatgagga gccttagtgg agattccagg   1680
tgaatattta tgaaaaagtc aacattagaa ctgaaaatgg aaataaactg cttgaaaaga   1740
caaaaaaaaa aaaaaaaaa aaaaaaaa   1769
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<210> 1504
<211> 1149
<212> DNA
<213> Homo sapiens

<400> 1504
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ctatcatgtt cctggtagga ggttgcatct tatttcaagc ggtgggaaaa caggacctgg   180
ctttgcatta gtaactgaag ccaggtggtg aactctcagc atgtgtaagg agccggctga   240
gaaggagctt tgctcccatg atattaaatt atctgattat tgaaaacttt tgtaaatggt   300
cattagtgag caaattgtct ttttaaaaat tctattatga aagagtttta aacttaacag   360
aaaataggca agaacagtgc caagaactcc tgtacactcc tttgcccaga gactattcct   420
ttagagcaaa ggctacagcc cagaatcacg cgcttcaccc cattcatcac agctctcctt   480
tctgtccatc tggtgccact cctcagtttt cctgaacttc gcgattttg gcgtttgtgg   540
aggttatagg ctgatcattt tgtagaatgt ctttcaatgt ggattcgttg atgtttctgc   600
atgattagac cccacctgtg tgtacttgaa gcctgaatgt cacagactct gttcttttta   660
tcctattctg tgtctttctg tccagttact ggtgaggtta ctgctgtcgc cttgaagcac   720
aaggtgttct gggtttgtct tgttttttca tgaccctgta actggccaca tcttcaagga   780
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tatttccact agggtattgc agctcccaga ccttctcata ggatagagct aggggacttg   900
tacatttata gttatttctg tatctgcgtc atatatcatg ttcacacaaa tgcatctaat   960
tccaatctaa catcacagag ttgtctttta aaaatatgac aagctggcca tgcgtgatgc   1020
tcacgcctgt catcccagca ctttgggagg ccaaggcagg cggatcacct gaggttggga   1080
gtttaagacc agcctggcca acatggagaa acctcgtctc tactaaaaaa aaaaaaaag   1140
ggcggccgc   1149
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<210> 1505
<211> 1281
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (29)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (47)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (83)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (121)
<223> n equals a,t,g, or c

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<221> SITE
<222> (133)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (154)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1166)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1262)
<223> n equals a,t,g, or c

<400> 1505
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naattgtgag cgnataccaa tttcacacag gaancagcta tgaccatgat tacgccaagc     180
tctaatacga ctcactatag ggaaagctgg tacgcctgca ggtaccggtc cggaattccc     240
gggtcgaccc acgcgtccgg gaggcagagg ttgcagtgag ccgagattgc gccactgcac     300
tccagcctgg gtaacagagc aagactccat ctcaaaaaaa gaaagaaaga aaaagaaag     360
tacaagttta taaagtatta tagtgaaaaa ttcgcattct ggctgatttt aagccattta     420
aaatttatat aaaacaacct tccataaaaa tttgacaggt gcccagatgt tgctttctcc     480
atttattttt tgttttttt taatcacagt aggtctgata gagaattgga gctaaattat     540
aatattttg ttggtaaagt tgagttatat acttgtacat acaatggaaa tgcttttagt     600
agtgattatt tagcaatttt tgttttgtt atattaggca tgtttggagg ctttcctatt     660
ctagcattta aatttaaatt ttattaaaat taaataattt aaatctagca tttaaattta     720
aataatttaa gtctagcatt tacttttaaa taattataat gaagttttga aatactaagt     780
taatccagac ctttagttgt cccatggtgt taataaagtt gccaaagaag atgtattatg   ·840

877

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aacaattcag caataagaca attgtcaaca cagttgagaa taacaatggt aatcgttagt    900
aatatttaga attggaattt gcctactgaa atagttatag atgattactt gtgatgtgaa    960
actgaattga gcatgacaac cagacatttc cagttggttt tgtaagtttt gagaatctag   1020
atactgggtt ttattttttg aaagattagc tctgtttgta agggctgatt ccttgaaaat   1080
gtaattttcc agaaaaacac ctaaagaaaa taaaacatgg acatgcctag taaaaaaaaa   1140
aaaaaaaaaa aaaaaggggc ggccgntcta gaggatccaa gcttacgtac gcgtgcatgc   1200
gacgtcatag ctcttctata gtgtcaccta aattcaattc actggccgtg ttttacaacg   1260
                                                                     1281
tngtgactgg gaaaaccctg g
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<210> 1506
<211> 1149
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1138)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1139)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1140)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1143)
<223> n equals a,t,g, or c

<400> 1506
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gagtggaatg attaatgatg ttttgcagca gttttctacg tctgaaattt tttatgtctc   180
tggaaccyag aatttgctaa gagatggagg aacctcagaa aagctatgtg aacacaatgg   240
accttgagag agatgcaacct ctcaaaagca ccggccctca gatttctgtg gtcctgctcg   300
tctatcactg gagcagcagg gaatctgaac acgacctcct ggtccacaag gctgtggcca   360
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acagggaaag gtttttatct gaacgagtaa atggaaggtg aggagcaaag tcttctgaca   480
caccgtggac attttagaaa acagctttct tgagatataa tccaggccag gcgcggtggc   540
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ttccagacca ggcttggtag tgcacacctt gtaatcccat ctattcggga ggctgagaca   660
ggagaatcac ttgaacccaa gaggtggagg ttacaatgag ccaagatcat gccactgcac   720
tccagcctag gcaacaaggc aagactccat ctcaaaaaga gagagagaga gatgtaatct   780
acataaaatt cacacgtttg aagtgcacaa tccatggttt ttaatgtgtt cacaaatagt   840
gtgattatca ccacagctgg ttttagaaca ttttcatcac cctaaaagaa agctttacc    900
cttcagtcaa tcctcatttc tccccaaccc ccagccctg gcaaacacca ttctactttc   960
tgtctttatg gatttgtcta ttctggacgt ttgatataaa tggattcata caaaaaaaaa  1020
aaaaaagggc ggccgctcta gaggatccaa gcttacgtac gggtgcatga accgaacnnn  1080
                                                                    1140
tanccggac                                                           1149
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<210> 1507
<211> 1869
<212> DNA
<213> Homo sapiens

<400> 1507

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caccatttat tttgttgctc cagttcttcc agctgtggcc aatccttcag ttggattctt     180
gtgccccatc aacattctcc atcctggctt tttgttttga gcacttcctt ccttcctagc     240
accaccaggc tcttgtatta tccctgtccc tgccctggaa tcgactcctc ctccagagag     300
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tatattatta ataccactag ttactacatt ggtacttttc aagcaaaata tatctaagtg     540
ggatcaaatg agactgtaaa tagctttaca tcagttcagg tcagttatgt tgctaaatta     600
cttttggcat taagtttagg gaaaaaaaat tgggtttggg attttttggt ttcaacattt     660
gtgattgaga gactatggac ctgtaataag tccaagaaca gcagttgcag tgtaacagga     720
ctgttaatgg aatcgggtca tttagaaaca gtcaagactt cgctgttgtg catgtggtta     780
ggagccagtg cacacgtcag ttcttaggaa atgtacagtc tgagcaatag catttgaaat     840
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agaactataa atgggtatgt atacctttct gctgtctaag ggcagagaag ggaaagaaag    1080
tgtggtgctt atcagaggag acagcagcaa gacacattgt gacagaaaac caagggtatc    1140
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ctacctatat atatacataa tatatagtac tgcttatata tatatatgcc tatatgtaca    1800
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aaaaaaaaa                                                            1869
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<210> 1508
<211> 1867
<212> DNA
<213> Homo sapiens

<400> 1508

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caccatttat tttgttgctc cagttcttcc agctgtggcc aatccttcag ttggattctt     180
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aaaaaaa                                                              1867


<210> 1509
<211> 1156
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (11)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (942)
<223> n equals a,t,g, or c


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aacttttaga taaagatcct tatagactga aagaatgtag cctctgcatt aatggtaaat    180
ggtctagaag ttttcgtttc cactgaggct tccgccactc gcttttttaa acttcctgct    240
atggtttgga tatggtttgt cctcaccaaa actcatgctg aggcctgagt ccccagtttg    300
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cctccctggc cattgagggt gataaaaagw aagccccact cctatcacag gcaatgaagg    1080
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aaaaagggc ggccgc                                                     1156


<210> 1510
<211> 1472
<212> DNA
<213> Homo sapiens


<400> 1510
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ggtggctgtg acaggggtgc tggtagtcac actcctggtg gtgctgtacc ggcggcgtct    180
gcactagtga agccctgggc tcttcccacc acccatctgt tccgttcctg cagtaycctt    240
ggcccctctc cgaagcccct tgtcccttc ttggggattg tggargctgg gtcagargggg     300
arttaaggga ctgcaggcct ggcagcarga catgccttgg ctgaaccaag tcctgagagc    360
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agcatctctg tccccacggt gccttgtgtg ggtccccgtc cttggctttc tgggtcctgg      420
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agaggagctt cctcctccag gcctcagccc tgttggccca ggtggagcag gagggaccac      540
tggaacatgt ggtgcttggg aatgcctctc ctgttgcatt ggtccctgaa ggcctcaggg      600
caggtatgtg gtgtgtgggc gactccacaa gacctgcctc ccatcctggc agcccagcct      660
gagaccgttg cattgaggca ggcaggagcg gcagggtggc tgctctccag gagcccaact      720
gccttgagtt cctgccccac tgggcccct ccctgctgg gcaatcctgg gaaggtctgg       780
aggttcctgt ggacctcagg gaagccaggg gcagctgtca ggcctgagga agacctgtgg      840
agctcctctc cagcctcctc tttccctccc ctctggtctc cattctcttc agctccctac      900
atgggctggg gaggagacac ctggtgggca gagctcaggc agaggtttgg atttcagctc      960
cctcacttcc ggggctgtgt ggctttggca gatgtcagac ttctggtctt gcttctccac     1020
gtggacagtg agtatctggc tcattcttca ctgggttctt ctgagattga acctacaggt     1080
gtttgccaag tgcctggccc agagcaagtg gccactgctt ctcccatctc tctcctgccc     1140
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cagcacaggc agcctaggcc tgcgtcccaa cctgcctctc accagctctg tgaccttggg     1260
caagggattt atctgtctgt cccttagttt tctcacctgt aaaaggagga taagtatata     1320
tatatatttc ccagtgttgt gaagattaaa ggagtttatc gatgtaggtc ttaggatgag     1380
tcctggcatt taccaagggt tggatatatg ttattatcac tattaagtgt tgagggtcca     1440
ggcatgctgg gcaacaggga ccccatctct ac                                    1472


<210> 1511
<211> 1991
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (231)
<223> n equals a,t,g, or c

<400> 1511
ctctgttctc tggaatgcca tgatccatcc actgtgcaat atgactctga aaggggtagt       60
atggtaccag ggggagtcca atataaatta taacacggat ctgtacaatt gcacattccc      120
tgcactcatc gaagactggc gtgaaacctt ccaccgtggt tcccaggggc agacggagcg      180
tttcttccca tttggacttg tccagttatc ttcagatttg tctaagaaga nctcagacga      240
tggatttccc cagatccgtt ggcatcaaac agcagacttc ggctatgtcc ccaacccaaa      300
gatgcccaat actttcatgg ctgtagctat ggatctctgt gatagagact cgccttttgg      360
cagcatccac cctcgagata aacagaactg tggcttatcg gctgcatttg ggggcccgtg      420
ctctggctta tggtgagaak aatttgacct ttgaaggacc actgcctgag aagatagaac      480
tcttggctca caaggggctg ctcaatctca catattacca gcaaatccag gtgcagaaaa      540
aggacaacaa gatatttgag atctcctgtt gcagtgacca tcgatgcaag tggcttccag      600
cttctatgaa caccgtctcc acccagtccc tgaccctggc gatcgattct tgtcatggca      660
ctgtggttgc tctccgctat gcttggacca crtggccttg tgaatataag cagtgtcccc      720
tataccaccc cagtagtgcc ctgccagccc ctcccttcat tgctttcatt acagaccagg      780
gtcctggaca tcagagcaat gttgctaaat gactgtttca gtatgatcag aacttagata      840
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aggaaattaa tagaaagcct cattgaatgg ctttcagcta gcacatggct gtttctatat      960
tctgatgagc ccaggctyat aggtaacttg aaatgcttgc tttttgttcc ctagttggtc     1020
taagggtctg tattggacta attctgaact acagacaaat tggacctcaa tgtcatttat     1080
ttccctcata ttaatgggag tgaaatgtct aatactttg cccctttta tccagagttg      1140
tgggatctca ggattggaag agattttaaa ggccacatag gccagctagt gttcatgtgt     1200
tctttataaa atttctccca tccaagtact aaccaggccc gaccctgctt agcttccgag     1260
atcagatgag atcaggcgcg ttcagggtga tatggccgta gacgtctta caaaattcct      1320
gacaggtggt tactgaatct ctctatgaac tttccattca aaactttcca gttttttcct     1380
tatgtggaac cgaaatcttt ctttctcccg tgaaacttta ctactatcag ataattgaag     1440
acagatctct ttgtattctc ttcaagccca aaccaattct gttccttcaa tctaaatagt     1500
ggtaatatga atgtttaaga aatgaaataa gaaacatgtg caggcacttt ggaaggtgct     1560
aagtgactgc cctaaggaat gaaaagcaag ggccaggtgg gagtagccca gcgaaggcac     1620
ttgggctgcc aggaacagga ggcgtgggaa actctggctt aggaaaacat gaacacaggg     1680
gcaacagagg caaactgttg ttcgagttaa atataaatct caggctcttt aaaggtaaaa     1740
ggtttaagga taatccattt ggaagaagaa aagagtgagg ctgaaagtaa agccacatga     1800
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caagcatata aaaaaaaatg cagatgatac aaatatgaaa gaggccttca gtgtttgttt      1860
attaagaatc ttaatgcagt ttactgatgg attaaaaaca gctaacattg tctgaaaatt      1920
atgttaccta taagaagttg gaaataaata aaagcataat cactaaaaaa aaaaaaaaa       1980
aaaactcgta g                                                           1991

<210> 1512
<211> 1994
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (231)
<223> n equals a,t,g, or c

<400> 1512
ctctgttctc tggaatgcca tgatccatcc actgtgcaat atgactctga aaggggtagt        60
atggtaccag ggggagtcca atataaatta taacacggat ctgtacaatt gcacattccc       120
tgcactcatc gaagactggc gtgaaacctt ccaccgtggt tcccaggggc agacggagcg       180
tttcttccca tttggacttg tccagttatc ttcagatttg tctaagaaga nctcagacga       240
tggatttccc cagatccgtt ggcatcaaac agcagacttc ggctatgtcc ccaacccaaa       300
gatgcccaat actttcatgg ctgtagctat ggatctctgt gatagagact cgccttttgg       360
cagcatccac cctcgagata aacagaactg tggcttatcg gctgcatttg ggggcccgtg       420
ctctggctta tggtgagaak aatttgacct ttgaaggacc actgcctgag aagatagaac       480
tcttggctca caaggggctg ctcaatctca catattacca gcaaatccag gtgcagaaaa       540
aggacaacaa gatatttgag atctcctgtt gcagtgacca tcgatgcaag tggcttccag       600
cttctatgaa caccgtctcc acccagtccc tgaccctggc gatcgattct tgtcatggca       660
ctgtggttgc tctccgctat gcttggacca crtggccttg tgaatataag cagtgtcccc       720
tataccaccc cagtagtgcc ctgccagccc ctcccttcat tgctttcatt acagaccagg       780
gtcctggaca tcagagcaat gttgctaaat gactgtttca gtatgatcag aacttagata       840
taaggatggg tccttcagat tttagcattt aggagtttca ataataacca ttgctttttaa      900
aggaaattaa tagaaagcct cattgaatgg ctttcagcta gcacatggct gtttctatat       960
tctgatgagc ccaggctyat aggtaacttg aaatgcttgc tttttgttcc ctagttggtc      1020
taagggtctg tattggacta attctgaact acagacaaat tggacctcaa tgtcatttat      1080
ttccctcata ttaatgggag tgaaatgtct aatacttttg cccctttta tccagagttg       1140
tgggatctca ggattggaag agattttaaa ggccacatag gccagctagt gttcatgtgt      1200
tctttataaa atttctccca tccaagtact aaccaggccc gaccctgctt agcttccgag      1260
atcagatgag atcaggcgcg ttcagggtga tatggccgta gacgtcttta caaaattcct      1320
gacaggtggt tactgaatct ctctatgaac tttccattca aaactttcca agtttttcct      1380
tatgtggaac cgaaatcttt ctttctcccg tgaaacttta ctactatcag ataattgaag      1440
acagatctct ttgtattctc ttcaagccca aaccaattct gttccttcaa tctaaatagt      1500
ggtaatatga atgtttaaga aatgaaataa gaaacatgtg caggcacttt ggaaggtgct      1560
aagtgactgc cctaaggaat gaaaagcaag ggccaggtgg gagtagccca gcgaaggcac      1620
ttgggctgcc aggaacagga ggcgtgggaa actctggctt aggaaaacat gaacacaggg      1680
gcaacagagg caaactgttg ttcgagttaa atataaatct caggctcttt aaaggtaaaa      1740
ggtttaagga taatccattt ggaagaagaa aagagtgagg ctgaaagtaa agccacatga      1800
caagcatata aaaaaaaatg cagatgatac aaatatgaaa gaggccttca gtgtttgttt      1860
attaagaatc ttaatgcagt ttactgatgg attaaaaaca gctaacattg tctgaaaatt      1920
atgttaccta taagaagttg gaaataaata aaagcataat cactaaaaaa aaaaaaaaaa      1980
aaaaaaaaaa aaaa                                                        1994

<210> 1513
<211> 712
<212> DNA
<213> Homo sapiens

<400> 1513
cccccgggct gcaggaattc ggcacgagtt cgcctcaccc tccccagtgc actgaagaag        60
gtaaccgggt ccagacccac gcggcgccag ttctccggcg ggaaggaaaa ccgcgcagag       120
aggcagcaat gaatgtggat cacgaggtta acctcttagt ggaggaaatt catcgtttgg       180
gttcaaaaaa tgctgatgga aagttaagcg tgaaatttgg ggtcctcttc cgtgatgata       240
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882

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aatgtgccaa cctctttgaa gcattggtag gaactcttaa agctgcaaaa cgaaggaaga    300
ttgtaacata tccaggagag ctgcttctgc aaggtgttca tgatgatgtt gacattatat    360
tactgcaaga ttaatgtggt ttacatatct ttatgtactg ccattttttg tttctggtaa    420
actggaatat aaagtgaaag aacaaacatt tgaacatact taatgtattt ttatagaact    480
ttgtaaacga aaggagattc atgtttttaga agtctgtcct tttttatatc ttgaaagaaa    540
atctatgtat gatgctataa aataattaga cattttctat agatatttga cattctgcga    600
aagcaacaag caaactgaag accaactcct atgagaaata ttatgatgtt tatgtaataa    660
agacatgtaa ctgtcttaaa tttaaaaaaa aaaaaaaaaa aaaaaactc ga    712
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<210> 1514
<211> 486
<212> DNA
<213> Homo sapiens

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<400> 1514
gaattcggca cgagctccag agtgttccca tgatcaccac gtcctttgat cagtgccatc    60
tggaagagca gatgagtgca gccctcctct catcctctct gtgctggctc cgaacgcttg   120
cttacagacc caccaacaac caagaagctg cactggttgg tacacactgc agcaaacaag   180
gaaaacaagt atgataaaaa gtccaacatc aaaaagaaaa aaaaaaccat agaaacaatt   240
gaagagagaa tggctaaagg acatgaaaag acagttcata caaagggaaa ttcaatgctg   300
ttctcgctga ggctggagtc caatgatgcg atctcagctc actgcaactt ccgtctcctg   360
ggttcaggag aatggcgtga acccgggagg cggagcttgc agtgagctga gattgcgcca   420
ctgcactcca gcctgggcga cagagcgaga ctccatctca aaaaaaaaaa aaaaaaaaa   480
ctcgag                                                             486
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<210> 1515
<211> 654
<212> DNA
<213> Homo sapiens

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<400> 1515
aaaagccgcc cttagccccc tcctcccctt tcctgcttct gcgagaactc cctccctccc    60
tccagctccg ccagcccagg cgccccttcc ctggaagccg agcggcttcg ctcgcatttc   120
accgccgccg cctctcgcaa tattgcaata taggggaaat gactaatgaa gctaattaaa   180
agaagcattc aaatctgctt tctaccctca ttaacaatta gcagggcact ggccagagtt   240
tgtaccctgt gttttacctt aacaacattc tatttgctct ttgtatattt aagtgttgta   300
aggaaacgtg tttcaatcaa aactgaccat gagataaagg aaagagatgt ggcttttgtg   360
atattctatc acaaacactt attgtatctc tgtaaaatac aatgtatgta tgcatgtaag   420
tgtttttgtc ctaatgttgc tactcccatg gcaaagaaaa aaaaagaat gaaaaaaaga   480
aaaaaatttg gaaaaaaaaa tcaggctcat agcagctact gtgtagaaaa ttccccctac   540
ttctaatttg ctgaatgaag aaaaaaaaaa atcttttatt tgtgatattt tcagagacat   600
ttgctctagt atggtgtatt taaataataa aaacttaaaa gaaaaaaaaa aaaa        654
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<210> 1516
<211> 974
<212> DNA
<213> Homo sapiens

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<400> 1516
ggcacgagcc agggcgcacc cgtcggcggt aaaagctgag gggctggcgc gggggattgg    60
tgggcgacac ttttacgtct acacgtgcct acccgtctgc acgtttctga gtccgcacgg   120
ttgtcttctc ttgctgaatg gacataggtg ttttgttttg tcccaagaga tacaggcaag   180
cagtacaggg gtgatggagt gctccttgac cttagcgggg ctgaccctgg cactccctgt   240
aggtctcccc gctgcgaaga ctgagtctct tcactgcagt ttctctccag ttacccgccc   300
tgtctacggc ccaaacggcc atgctagtga aaacctgccc tggccgctaa gcaagcctag   360
cccaggctgt aacccatgtt tctagggctt gttttcctct gcagtcaaat cagagattcg   420
gagttgaagg gatcttagag gtcaacatgc ccaacctctt agcccgagtg agtgaatgta   480
cgctttttac ctgcacaccc cgaaaatcgc ccgttttctg gaaacaacgt tgattatgta   540
gtcctggaac tttcctgcat gcacatttta ttccttcgac aatatttatt gctacctact   600
gtgtgcaggc attgtaggcc ccggggatac gattaaaacc aatgaagaac gaaacgcaca   660
agattgttga tctcggccgg gcgcggtggc tcacgcctgt agtcccagca ctttgggagg   720
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cggaggtggg tggattgctt gaggtcagga gttcgagacc agcctggcca acctagcgaa    780
accccacctc tactaaaaat acaaaaattg gccgggcttg gtggcgtgcg cctgtagtcc    840
cagctactcg ggaagctgag gcaggaaaat cacttgaacc tgggaagtgg aggttgtagt    900
gagccaagat tccgcctgca ttctagcctg ggcaacaaaa tgagactctg tctcagaaaa    960
aaaaaaaaaa aaaa                                                      974


<210> 1517
<211> 472
<212> DNA
<213> Homo sapiens


<400> 1517
ggcacgaggc gagtgtcagt cggctctccg cacgtgtccg cggcctcgcg gagcagtcca     60
cccctggctg gtttctgctt ccacctgctg atctcacaga gcactgcaag ctatttggca    120
tatgaaggtc ttgacctgag aaaaccatct tggataactg cagcaaggaa aaggaaaaat    180
gcaacaccta ggagatttca gtaaacagta gaatcatgcc aacctaatct gtgttaaaat    240
gcttggaatg tgggagccgc tgatgatgcc tcttgtctgt gtgtctgact gaatcctttc    300
ttttctcaga gcagcaaagc aaagcctggg aaccaggcca aatgcctgcc acttacctta    360
aattgatcag ccactttgag attaaaaccc ctgaaagctg ccacaccgtg aaaacaaggc    420
ctccttcaca ttaaaggcaa attgcgactt tgaaaaaaaa aaaaaaaaa aa            472


<210> 1518
<211> 924
<212> DNA
<213> Homo sapiens


<400> 1518
ggatttctat gcattgtgta atattcagtg atgttgagat tttgcatgtt gttacaggtg     60
ctcttttcata tgtgtgtttg tggtgttgat gtggaattgt taaccactgc tgctatcact    120
tattgtagtt aaactgaaaa actgtgttaa aaggctgtgc cagtcaacat ttctatgtgt    180
gacttaagta actgtgtact tcattgttta atattttgag ccagcactta gtggcctcta    240
cagaaggaaa tattgtagtt gtcaaagtgg tgccaaactt gaaaatcttg tgtcatgttt    300
ataattccag gccaggtcag cttttcttca acactttccg agctctttga aagcaaaaaa    360
catttgcaaa aagagaaaga aagcaagaat tctgaacttt tctaatactc tctcctctag    420
aattttaaat attttttttct tttgatgttt gagtatctta cagaaaaatc caatcaaatg    480
actagcggta gaatttccct tgatctggat attttttaggc tgaacagtgt aatagcagag    540
gactatgagg tgcatacatt attttttgttg gctatcatgg cttattgttt gaatttcatt    600
taataacaat attcaggctg gaggtggtga ctcacacctg cattcccagc actttgggag    660
actgaggcgg gcggatcacc tgagatcagg agttcgaggc cagcctggcc aacatgacga    720
agcccagtct ctactaaaaa tactaaatta gctgggtgtg gtggctcaca cctgtaatcc    780
cagctacttg ggaggctgag gcaggagcat tgcttgagcc tgggaggtgg aggttgtagt    840
gatctgagat cacactactg cactccagcc tgggtgaggg agcaaggctc caacccccct    900
aaaaaaaaaa aaaaaaaact cgag                                           924


<210> 1519
<211> 807
<212> DNA
<213> Homo sapiens


<400> 1519
tttttttttt tttttttttt ttttttttc acaaagattg acaaaacttt aataaaagtt     60
aaatttacag acatcttaag ataacttggg aaatatgtag taaaaaagaa tcgagtccac    120
aaattaagaa tattttgcta atatgcccaa caccaatttc agcaaatcca atctacttaa    180
ctcatatatt taatgtggta attttttctaa caaaatttaa tggggtatg aatgatatat    240
ttatgccctt gacaaagatg acatgtgtga tttgttgtg actaagaaag gagagtatga    300
tttctggtgg ttatgatatc actctggctc atcgaagctc acagaatatg taaggttctg    360
ccacgtccaa agatgttagg caaatgtaat agaaggcgca ccgggctgac acacgttttc    420
atcatacaaa tcttctggca gttcctcttc atctccatca ggaaaatatg tagggaatgg    480
tagatttttta ccgagatcct tatatgcagg cagtttagaa tctttgacct ttactaagca    540
atttttatgt ccaggtacag agccatttac atagattatg ttgtgctttg tgtttattct    600
ccacactttc ccatttttcc aggcatttta gttccaggcc agactctgcc aatatcacca    660
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884

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gttgcaacag ctccaggtct cctgtgggtt ttcgtttgac catgcgtagc aggctggcct    720
ttaaatcccc atcttttcat gacaccttga aaacctttac caatagtttt ggctgtgaca    780
tccacatact gtcctgtatc tcgtgcc                                        807
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<210> 1520
<211> 893
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (18)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (28)
<223> n equals a,t,g, or c

<400> 1520
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ggcacgaggn aaaagaancc cgcttcangg ttgccagagt gtgataggta ccccagagtt     60
catggcccct gagatgtatg aggagaaata tgatgaatcc gttgacgttt atgcttttgg    120
gatgtgcatg cttgagatgg ctacatctga atatccttac tcggagtgcc aaaatgctgc    180
gcagatctac cgtcgcgtga ccagtggggt gaagccagcc agttttgaca aagtagcaat    240
tcctgaagtg aaggaaatta ttgaaggatg catacgacaa aacaaagatg aaagatattc    300
catcaaagac cttttgaacc atgccttctt ccaagaggaa acaggagtac gggtagaatt    360
agcagaagaa gatgatggag aaaaaatagc cataaaatta tggctacgta ttgaagatat    420
taagaaatta aagggaaaat acaaagataa tgaagctatt gagttttctt ttgatttaga    480
gagagatgtc ccagaagatg ttgcacaaga aatggtagag tctgggtatg tctgtgaagg    540
tgatcacaag accatggcta aagctatcaa agacagagta tcattaatta agaggaaacg    600
agagcagcgg cagttggtac gggaggagca agaaaaaaaa aagcaggaag agagcagtct    660
caaacagcag gtagaacaat ccagtgcttc ccagacagga atcaagcagc tcccttctgc    720
tagcaccggc atacctactg cttctaccac ttcagcttca gtttctacac aagtagaacc    780
tgaagaacct gaggcagatc aacatcaaca actacagtac cagcaaccca gtatatctgt    840
gttatctgat gggacggttg acagtggtca gggatcctct gtcttcacag aat           893
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<210> 1521
<211> 2037
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (28)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (68)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1974)
<223> n equals a,t,g, or c

<400> 1521
gttcccgggt caagaatggc cnaacctntt tacccagagg agatytacgg taactgragt   60
ctgccctnga acacctytca tatttggcac ccacggatac ggraggtggg tttgcatgtc   120
cagggtgcaa tcatggtgtc cagcgtggtg raggtggtga ttggcctgct ggggctgcct   180
ggggccctgc tcaactacat tgggcctctc acagtcaccc ccactgtctc cctcattggc   240
ctttctgtct tccaagctgc tggcgaccga gctggctccc actggggcat ctcagcttgg   300
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ggtccttctt cccggctcct ggccccagcc tggcctccca tccacttcct gattgtgcct   420
ctgcccccag ctccattctc ctgatcatcc tcttctccca gtacctgcgc aacctcacct   480
tcctgctgcc tgtctaccgc tggggcaagg gcctcactct cctccgcatc cagatcttca   540
aaatgtttcc tatcatgctg gccatcatga ccgtgtggct gctctgctat gtcctgacct   600
tgacagacgt gctgcccaca gacccaaaag cctatggctt ccaggcacga accgatgccc   660
gtggtgacat catggctatt gcaccctgga tccgcatccc ctacccctgt cagtggggcc   720
tgcccacggt gactgcgctg ctgtcctggg aatgttcagc gccactctgc aggcatcatt   780
gagtccatcg gagattacta cgcctgtgcc cgcctggctg gtgcaccacc cccactttgg   840
tttagcccca ccctgtcttt gagaggcctc gcccccgcat caagccccag ccggtttatg   900
cctcgctctt ataacaggcc ccgcccctgg aactaacccc gccccagcct cgtccccagg   960
tctagcttcc ccgctggctc cccggcaggt gggcagccgg cgcgtggtgc agtatggtgc 1020
ggctatcatg ctggtcctgg gcaccatcgg caagttcacg gccctcttcg cctcgctccc 1080
tgaccccatc ctggggggca tgttctgcac tctctttggc atgattacag ctgtggggct 1140
gtccaacctg caatttgtgg acatgaactc ctctcgcaac ctcttcgtgc tgggattttc 1200
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agggagccca gaggagcgtg gtctgataca gtggaaagct ggggctcatg ccaacagtga 1320
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acttcaagac taatgcataa tattaaacat catgttgaag aaataatttt agtntcgtaa 1980
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<210> 1522
<211> 1417
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (510)
<223> n equals a,t,g, or c

<220>
<221> SITE
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<223> n equals a,t,g, or c

<220>
<221> SITE
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<223> n equals a,t,g, or c

<220>
<221> SITE
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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1417)
<223> n equals a,t,g, or c

<400> 1522

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catacagaga tttccagcaa gctctctatg agttgtcata tcatgtaatt aaaggaaatc     180
taaagcatga acaggcatct aatgttctta gtgacattag tgaatttcgt gaggatatgc     240
cctccattct tgctgatgta ttctgcatat tagacattga gacaaattgt ttagaagaaa     300
aaagcaagag agactatttt acacagttgg tattagcatg tttgtattta gtttcagaca     360
cagttctaaa ggaacgcctg gatccagaaa cactggaatc attagggctt atcaaacaat     420
cacagcaatt caatcaaaag tcagttaaaa tcaagacaaa actctttat aagcagcaaa     480
aattcaattt gttaagagaa gagaatgaan gttatgccaa gctgattgct gaattggggc     540
aagatttatc tggaagtatt actagtgatt taatcttaga aaatatcaaa tctttaatag     600
gatgctttaa tctgggatcc caataggagt tttgggatgt cattttagaa gtgtttgaat     660
gcagaccagt aatgtacttt ctgtctctgt gatttngcct gttttggaca tttcatttaa     720
atggaattat gcaataattt gtggccttt gtgtttggct ttcacttagc atcatgttct     780
caaggctcat ccatgttgtg gcatgtatca gtactgcatt ccttttatg gctaaatgat     840
gtttcattgt atgagtgtgt accacatttt atttatccat tcagcaatta atggacagga     900
acaatggctt ttaagtatta aattgtaagt tcaacattaa atgtatycac agttattgat     960
aatatcaaga ttatacatgg tgtgaacaga atgctgtgtc gaaatggtat gtaaattatt    1020
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tgaatgaagg cagatgtgaa gatatttgcc acatgttgta ataatcatgt tttgaaatta    1200
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agtcaatata tttttaaagc aatttttata atttagcaga cactgcatct taatataagt    1320
tactattaaa attgtgtcct tgtgaaaaaa aaaaaaaaaa aantcgaggg ggggcccggt    1380
acccaattng ccgnataggg agtcgtatta ctttcan                            1417
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<210> 1523
<211> 1837
<212> DNA
<213> Homo sapiens

<220>
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<222> (1697)
<223> n equals a,t,g, or c

<400> 1523

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gattttacca gttttctgc tagtgtactt tttctattcc agggtccaat ctaaaatccc     180
acattgcatt tagtttgtgt gtattttctt tctttattat tatttttttt ttggtaatta     240
agttttttaa aaaggtcata gactataggg atttcattta caagaataat atcttcagca     300
tatggccctt tcctgatatg tctgactaat gggtttctaa aatgtatttg cagagattgc     360
cttgcaacag gtttccatgt tcttccgatc agaaccaaag tgggaggtgg tggaaccttt     420
gaaagacata ggtgagacat tggcacgctc attctgttaa aaagacagat cacagaactg     480
gatccttagt catgctttct gatacgtatc ccaggaacat gcttaaatgc aggtgacttc     540
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ttcttcatct   atcttttttca ctaaatctaa  actgaagtgc  tactttcctg  ccttttccgt    720
gaataatttc   ttcatttact  gtttctttttt aagtatagcc  tttactatgc  caacgttatc    780
aaatggttct   tttacttgtg  cctatgtagc  tgcgaataat  attgccaaac  ttaatttttc    840
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atcagccaaa   ggaacggcta  gtgttaagct  gggctgacct  tggcccagac  aagtattgtc   1020
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gatccctaca   aagttanaag  aggcattgag  aattgccaaa  gaatgtatag  agaagagact   1740
aattgaggaa   cagaaacaga  ttcaccagca  tcgaagactg  acaagagctc  agtcccacca   1800
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<210> 1524
<211> 493
<212> DNA
<213> Homo sapiens

<400> 1524
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caggctatgg  gtttggtgct  agaatggtgt  tgatactgtg  gtgttctctg  aggatgggga    180
tcccagccaa  tgccatctgg  catagtgctg  tacacaggtg  agtttgttta  ggaagatttg    240
gggaagatgc  ctggagtctt  tggaatggca  actcctgctg  atggagtaat  ctatctgtct    300
ctctttccag  gtggatggga  agagagtccc  aagggatgca  gggcatcctc  tgtaccccttt   360
taatgacccg  tactgagacc  acagcttctt  ggcctccctt  ccagctctgc  agctaatgag    420
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aaaaaaaaaa  aaa                                                           493

<210> 1525
<211> 460
<212> DNA
<213> Homo sapiens

<400> 1525
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ggttggcgat  gttcttattg  gcgatactct  tgccggtgtt  cctcgtagcc  tggggaggca    180
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catgcatttt  gaacgggcta  aaaaaaaaaa  aaaaaaaaaa                             460

<210> 1526
<211> 1369
<212> DNA
<213> Homo sapiens

<400> 1526
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ttttgtttta aattatagca gtagcttata tatccaaata tctattggtt gagccatcca    180
atagatgagt gacgcttagc tgttttatgt aaatggcttt cctaacaatg agaatactct    240
tttttgctta ttcatttagt aaaaaacatt ttttaatgga aatatctgag catggtcatt    300
aacgtggcca ctgcaacaca tattggtgga agtataaatt aatccagtgt ttctacaagg    360
caatgtgaca gtatcatgct ttaattcagt catttcattt ctaggaatta tcctaaggaa    420
atagttataa aagacacaca atgatttatg ggcatggctt tgcatttcag tgacatttgt    480
aataataaaa agttagaaac aaacgaaata ggttaaaaaa ttatggtatg cccaaatgaa    540
gacatattct cctatcagtg gtaattaata cttttaaaa attgtccaaa cttttttgcaa    600
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gcaggagaat ggcgtgaacc tgggaggtgg agcttgcagt gagccgagat cgtgccactg    720
cactccagcc tgggcgaaag agcaagactc catctcaaaa aagaaagaat aaaaagaaat    780
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gctataataa tgttaattaa gacgatttgt ttagcctggc ttagtggcat gcacctgtag    960
tcctagctac tcaggaggct gaggcaagaa aaaaaaattt gctggctgca cttgtatttg   1020
attatgttct ttcttgacta ccgattctaa catcaaaaca gatgcaacca gctgggcaca   1080
gtggctcaca cctgtaatcc cagcactttg ggaagctaag gcaggtggat cacctgaggt   1140
caggagtttg aaaccagcct ggctaacttg gtgaaacccc atctctacta aaaatacaaa   1200
aattagtcag gcgtggtggc aggcgcctgt aatttcagct acttaggagg ctgaggcagg   1260
agaatcactt gaacctggga gggaaggttg cagtaagccg agatcgcgtc actgccctcc   1320
agcctaggca acaagagcaa cactccatct caaaaaaaaa aaaaaaaa                 1369

<210> 1527
<211> 1556
<212> DNA
<213> Homo sapiens

<400> 1527
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ttcacctggg ctgcacctca gcctgtgtgg ccgtctataa ggatggccgg gctggtgtgg    180
ttgcaaatga tgccggtgac cgagttactc cagctgttgt tgcttactca gaaaatgaag    240
agattgttgg attggcagca aaacaaagta gaataagaaa tatttcaaat acagtaatga    300
aagtaaagca gatcctgggc agaagctcca gtgatccaca agctcagaaa tacatcgcgg    360
aaagtaaatg tttagtcatt gaaaaaaatg ggaaattacg atatgaaata gatactggag    420
aagaaacaaa atttgttaac ccagaagatg ttgccagact gatatttagt aaaatgaaag    480
aaacggcaca ttctgtattg ggctcagatg caaatgatgt agttattact gtcccgtttg    540
attttggaga aaagcaaaaa aatgctcttg gatccttcaa acatgatgtg agaggaaatg    600
cgcgagccat gatgaaatta acgaacagtg ctgaagtagc gaaacattct ttgtcaacct    660
tgggaagtgc caactgtttt cttgactcat tatatgaagg tcaagatttt gattgcaatg    720
tgtccagagc aagatttgaa cttctttgtt ctccactttt taataagtgt atagaagcaa    780
tcagaggact cttagatcaa aatggattta cagcagatga tatcaacaag gttgtccttt    840
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gatatattag ctgttcttac tatgaaaagg gatggatctt tacatgtgac atgcacagat   1320
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<210> 1528
<211> 1259
<212> DNA
<213> Homo sapiens
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889

<400> 1528
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tgcattgttt attcctcttc ccaacttggc atcaagtgta tcttatgttt ttctttctca     180
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cagttggatc tgcttcaccc tcttctcccc atgaagaaaa ttatatgtta agtgctcata     660
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<210> 1529
<211> 1217
<212> DNA
<213> Homo sapiens

<400> 1529
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tggtgatggg gaggtgtgtc tggatgcatt tcagctgtag ttgctgtttt gctttcccag     180
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gctaacttaa atgacatttg gcagcctctg tcccagaaaa gattatcatc tgctcctgtt     420
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ctggtctcca acaatactcc tgcatctgcc atctaagtag ctggaactac cgttgtttgc    1140
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aaaaaaaaa aaaaaaa                                                    1217
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<210> 1530
<211> 1876
<212> DNA
<213> Homo sapiens

<400> 1530
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cttcaggtta tcttatgatg aggcttttgc tatggctaat gatcccttgg aaggcttcca     180
tgaagtaaac cttgcttcac ctacttctcc ggaccttctt ggtgtgtatg aatcaggaac     240
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890

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atcccccaga  cgtttaaatt  gtgcggaaat  atctagtatc  agctttcatg  ttacagaccc    420
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acagaattaa  attaggggac  tcaagcaact  attattatat  ttctcctttt  tgcagataca   1380
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aacagcagga  tgttgatcag  atgttttggg  aggttatgca  gttgagaaaa  gagatgtcat   1500
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ttttaaactg  atctatgctg  tgtttgctta  ttctttagtt  gaacacacta  tgaagaattc   1740
caggtgtact  agtgaatgta  atttatagtt  gccaaaaaaa  aaaaaacctg  aaataaataa   1800
atgttagatt  gaaaaaaaaa  aaaaaaaaac  tcgaggggggg  gcccggwmcc  aattcgccct   1860
atagtgagtc  gtacac                                                       1876

<210> 1531
<211> 1876
<212> DNA
<213> Homo sapiens

<400> 1531
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cttcaggtta  tcttatgatg  aggcttttgc  tatggctaat  gatcccttgg  aaggcttcca    180
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tcaagagcag  actacctcac  caagtgtcat  ctaccggcca  cacccttcag  ctttatcctc    300
tgtacctatc  caggcaaatg  cattagatgt  ttctgaactt  cctacacaac  ccgtgtattc    360
atcccccaga  cgtttaaatt  gtgcggaaat  atctagtatc  agctttcatg  ttacagaccc    420
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caactataat  gcagagagag  agttttaca   gggtgctact  ataacagagg  cttgcgatgg    540
cagtgatgat  atttttgggt  tgagtactga  tagtctgtct  cgtttacgaa  gcccatctgt    600
tttggaagtt  agagaaaagg  gctatgaacg  attaaaagaa  gaactcgcaa  aagctcagag    660
ggaactgaag  ttaaaagatg  aagaatgtga  gaggctttca  aaagtgcgag  atcaacttgg    720
acaggaattg  gaagaactca  cagctagtct  atttgaggaa  gctcataaaa  tggtgagaga    780
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acctacgcag  gagcctttgc  caggtggaaa  gacacctttt  aaaaaggggc  atacaagaaa    960
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acaatactct  aagcattgaa  ccagtgggat  tacaacctat  ccggtttgtg  aaagcttctg   1260
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aacagcagga  tgttgatcag  atgttttggg  aggttatgca  gttgagaaaa  gagatgtcat   1500
tggcaaagct  gggttatttc  aaagaggaac  tctgatgctc  tgcgtgggac  catgcctgaa   1560
```

891

```
ctccccgaat aactgaaaaa tggctgaata tttttatggt tacttgatat ttatttccaa    1620
ggagtgagcc taagactttt ttcccctttt gcaaattgct ctaagaagta ccatgatttc    1680
ttttaaactg atctatgctg tgtttgctta ttctttagtt gaacacacta tgaagaattc    1740
caggtgtact agtgaatgta atttatagtt gccaaaaaaa aaaaaacctg aaataaataa    1800
atgttagatt gaaaaaaaaa aaaaaaaaac tcgagggggg gcccggwmcc aattcgccck    1860
atagtgagtc gtacac                                                    1876
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<210> 1532
<211> 1133
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (38)
<223> n equals a,t,g, or c

<400> 1532
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caatcccccc gaawaawaga aactgggaaa kgataaancc ccctaatgcc caagggtccw      60
agtgtgwtcc ytagtggtta wactgggaag tgtgtggaga atttaaggtg cctgctctgc     120
tgctcyggat ggctgaaggc tccygggcca tcttcatgtg ctgcttgaag agctcctatt     180
ttgtactcct ggctagaatg ctgtggaaca aatacaaagt gaaaaaagtt ctctgtagat     240
ttctgaagtg catattcatt gatgccaaga aaaaaaaaaa gttgcctttt tgaagtgatg     300
ttttttgctg tcttcttaaa cacaaggctt ttttgaatga ttagtatatt tcatggtaaa     360
gaaaacagcc tgtctggctc aaagcaatta aatagaatgt aatggtgagt acaaatgagt     420
gcacatgtca ggactcaggt ctaactcctt gtctcctgag cctaaagatt gcaacataca     480
caagaacaca ctcctattcc taccccacac actcagggac aagcccaact aaagcttaca     540
aggagaccag ggtggctctg tccaggggag aagccagtta tggaacagtg cattgagagc     600
catggtagga gaggcccaca gttctctgga gcatgcagca ggggcacccc acctggcctt     660
gaggatcagg gggagtcaaa ggataaagca tggggctgat gacgtctgag ggagtgtgat     720
cctccatgta tggcctctgc ctgctgtctc acatgtccct tctggtggtc acttgggctc     780
taggagtata cgtcacctca gaccatctgg cagaaatact ccaggctcct accccaaagc     840
acatgtcagc cttgctgctg gagcacgaag acaatgtaaa tgaaacatga aatggaggag     900
ttgtgagacc ctgaccctga gtccttactt gaaagctgct gctggtgttc tgagtgtctt     960
ttggactctt atttcttgcc cttttcctta ttaggcaagc agtaacttag gaagtaggta    1020
agagcaataa atgtgacatg ttatgtcatc atagtaggag ctcatgggaa taaaagtcag    1080
tggcttgatg cttctgttag aggcaaaaaa aaaaaaaaaa aaaaaaaaa aaa            1133
```

<210> 1533
<211> 1609
<212> DNA
<213> Homo sapiens

<400> 1533
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aattcggcac gagcggcacg agcagccttc ctcccccagc ctgagtgact actctattcc      60
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accgcaggcc tggtgattgg ggctggcgcc tgctattgca tttatagact gactagggga     180
agaaaacaga acaaggaaaa aatggctgag ggtggatctg gggatgtgga tgatgctggg     240
gactgttctg gggccaggta taatgactgg tctgatgatg atgatgacag caatgagagc     300
aagagtatag tatggtaccc accttgggct cggattggga ctgaagctgg aaccagagct     360
agggccaggg caagggccag ggctacccgg gcacgtcggg ctgtccagaa acgggcttcc     420
cccaattcag atgataccgt tttgtcccct caagagctac aaaaggttct ttgcttggtt     480
gagatgtctg aaaagcctta tattcttgaa gcagctttaa ttgctctggg taacaatgct     540
gcttatgcat ttaacagaga tattattcgt gatctgggtg gtctcccaat tgtcgcaaag     600
attctcaata ctcgggatcc catagttaag gaaaaggctt taattgtcct gaataacttg     660
agtgtgaatg ctgaaaatca gcgcaggctt aaagtataca tgaatcaagt gtgtgatgac     720
acaatcactt ctcgcttgaa ctcatctgtg cagcttgctg gactgagatt gcttacaaat     780
atgactgtta ctaatgagta tcagcacatg cttgctaatt ccatttctga cttttttcgt     840
ttattttcag cgggaaatga agaaaccaaa cttcaggttc tgaaactcct tttgaatttg     900
gctgaaaatc cagccatgac taggggaactg ctcagggccc aagtaccatc ttcactgggc     960
tccctcttta ataagaagga gaacaaagaa gttattctta aacttctggt catatttgag    1020
```

```
aacataaatg ataatttcaa atgggaagaa aatgaaccta ctcagaatca attcggtgaa   1080
ggttcacttt ttttctttt  aaaagaattt caagtgtgtg ctgataaggt tctgggaata   1140
gaaagtcacc atgatttttt ggtgaaagta aaagttggaa aattcatggc caaacttgct   1200
gaacatatgt tcccaaagag ccaggaataa caccttgatt ttgtaattta gaagcaacac   1260
acattgtaaa ctattcattt tctccacctt gtttatatgg taaaggaatc ctttcagctg   1320
ccagttttga ataatgaata tcatattgta tcatcaatgc tgatatttaa ctgagttggt   1380
ctttaggttt aagatggata aatgaatatc actacttgtt ctgaaaacat gtttgttgct   1440
ttttatctcg ctgcctagat tgaaatattt tgctatttct tctgcataag tgacagtgaa   1500
ccaattcatc atgagtaagc tcccttctgt cattttcatt gatttaattt gtgtgtcatc   1560
aataaaattg tatgttaatg ctggaaagaa aaaaaaaaa  aaaaaaac              1609
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<210> 1534
<211> 1359
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (808)
<223> n equals a,t,g, or c

<400> 1534
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ggcacgagcc gaggctggca ctggcacaac tacctgagga tggctcgcag ggcagtcggg     60
agctgctgct ggctctgtcc tggctcttgg cccgaggacc tgtgcccgag cagatgctgg    120
cccaggcccg agtgcctctg ggtgacgaga tgactgtgtg ccagtgtgag gccctggcca    180
gccctggccc acctgcaccc cacatggaag cagagggtcc tgtggatgtc cgccatgtgc    240
agtggctgat gggaaagctg cggttccggt ggcgccagct ggtgtccagt cagcaggagc    300
agtgcgccct cctgagcaag atccacctgt acacgcgcgg ctgccacagc gaccagagcc    360
ttagccatct gtctgtcact gaagcagaga tgctcagggg acccagaggg aggccagcag    420
ctgctgcggg actctggagc gtgagaacca gcgcctggag gctgtcctgg cgtggcggcg    480
ctctgagctg gtcttctggc ggtggatgga cacggtcctg ggcacctgtg ccccggaggt    540
gcctgctgca gcctcacagc ccacccccct gccctgggtc cccgagcgcg ggggtggcga    600
gttggacctg gtagtgcggg agctgcaggc actggaggag gagctgcggg aggctgcgga    660
gcgcaggcgg gcggcctggg aggccaaggc tggaggctgt ggacgggggc cagagtggag    720
tgccgcgcgg cgggcctctc gggaggctgt ggaaaaggag ctgggagctc tacagcagtg    780
ctgggagcga gacggtggcc cggcccancc ccatgggcca caccggctgg tgagacgaaa    840
ggatggggca gcaggggacc gggacctgcg ggcagctgtg gtgatcagga cgctgaggag    900
ccaggaggcc tgcctggagg cggtgctacg tcgactacag ggacagtgtc ggcaggaact    960
ggccaggctg gtgggagccc gccctggtct catctggatc ccgccacctg gacgctgagg   1020
gcctgtcgac gggccctcgt gtgggaagcc tgccctggcc cagcctggct gggtcttgga   1080
ggagcagatt ccaaggccag gtggccgcag ggacgatgca gatgcagagc ccacgtcaca   1140
tgctcgctcc aggggtgggg ctgggctgac tctggccgga tcccaggcct gtggctagca   1200
gcactgggga caggaatggc tggtcccttg aggaggtcgt gacaggctca gcctggtggt   1260
ctggagggga ctcggaaata aattgtagca gctttcctgc caaaaaaaaa aaaaaaaaa   1320
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa                           1359
```

<210> 1535
<211> 1490
<212> DNA
<213> Homo sapiens

<400> 1535
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ggcacgagtg gactcgagca aagatgacct cactggagtt ggactttctt ctctttgctc     60
ctggcagtgt tcccactgat gccggttgta ggtcgaaagc cagacatctc tctagtgatg    120
ggtgcaggct tgctggttct tctgttatcc ctgtgtgttg taacatctct catgaaaaga    180
aaagatagct ttataaagga agagctattg gtacatcctg tacaggtgct gagcacagtg    240
ctctccatgt atgttgtgta tagcactcag agtagtctac tcaggaagca aggactgcct    300
ctcatgaatc aaattattag ctgggcaaca ttagcctctt ccttggttgt gccactactg    360
agttctccag ttctctttca gcgattgttc agcatacttc tttcattgat gtcaacctac    420
ctacttctaa gcacagggta tgaagctctc tttccactag tgttgtcttg tttgatgttt    480
gtctggataa acatagaaca agaaactcta caacaatctg gtgtttgctg taaacaaaag    540
```

```
ctcaccagta tccagttctc ttataatact gatataactc agtttcgaca gctttgatct      600
tgcctctgtc tattgctttc tgactgtgtt cagtcctttt atgatgggag ccctgatgat      660
gtggaagatt ttaatcccct ttgttcttgt tatgtgtgct tttgaagcag ttcagttgac      720
tactcagtta tcgtcaaaaa gcctttttct cattgttctc gtcatatcag acattatggc      780
tttgcatttt ttcttcttgg tcaaggatta tggcagctgg cttgatattg ggacaagcat      840
cagccactat gtgattgtca tgtccatgac catctttttg gtgttcctca atgggctggg      900
cccagctgct cacaacgaag aaactcagac tatgtggcaa acccaaaagt cacttcatgt      960
gaggttgctg aagcaccatt cagcatctgg atcctgattc tccttttaag ctaaaatctc     1020
atcaaggctt caataagaag atggatatgg atatatagta tattctactc ctgtaaggaa     1080
aatggtattt ggaattccga attgacaggt tatctggaac aaaggagctt cttttttttt     1140
ctaggttttg caggcatgaa atagtgatta tatctgtgga aaagcatagg aaggcattct     1200
ccttttttcat tttttttcctt tggctggcag ctcttcccag tgatgttgag agcacctgca     1260
gcaatctggt ccccagtcgc acaacttccc acatacccag aggagagcat atgcctgtgg     1320
gggcagtgct gatggcatcc agagtcattg ctgtggctga gctggaagga aatcaccagg     1380
tgccaccgtc aatatttatc agctttcagc actggttttg ttagacagtc agggtgtatt     1440
atttcaagag cttcaataaa aaagtgtttt gcaaaaaaaa aaaaaaaaaa                 1490
```

<210> 1536
<211> 522
<212> DNA
<213> Homo sapiens

<400> 1536
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aaaatataaa aataaaatgc acgtcttcca ttcttcccca ctgcctgtgt atagtggagg       60
ttggtgctca ctcttggtcc ttctgagctt agcagaaaga actatgggca gttctacctg      120
aaaagggaga actcacatgg gcaggaaaga gcattgtggc aacaaaggag aggtcctcac      180
tctgctcggc tctaggaagc cacaggcggc ttgatatcag ctcagtctac aagaagtctt      240
tccttccact gcttgtggtt gatttttaat ttttaatgta aaagcatatt gcttgagcca      300
gggaatttga gaccagcctg ggcaacatgg tgagactcag tctccacaaa aaatacacaa      360
aattagccgg gcgtgttggc atctgcctgt agtcccaact acttaagggc ctgaggtggg      420
aggatcgctt gagccccagg aggtcgaggc agctgtgagc tgagctgaga tcacaccact      480
gcactccagc ctgggagtgc aaaaaaaaaa aaaaaaaaaa aa                         522
```

<210> 1537
<211> 930
<212> DNA
<213> Homo sapiens

<400> 1537
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ggcacgagct ctatctggga tagagttaat gagggctgca aaaatagcat cttcatggaa       60
aaacagggac aaatttgtgg atgcaagatt ccagccctta gaagttcttg gcatagtaaa      120
tgtttaactt aataaatttt ctatgcctta gtaatggaat ttcctgcttt ttgggaaata      180
tatgcattta ttatttctgc tcctgtgttt cacatgcaaa taatacagaa aggagcaaga      240
tggacaaaga tcttgctgtc ctacaattta catctaatgg gaggagacat cccacatata      300
acctaagttt taaaaacaaa tgatgaattt taaatgattt taattgtttg cgattgcact      360
gctttttggt gcacccgtct agattcaata ttgcatttta tgtgttcatt tgtttcgatc      420
agacaggcat tttgaggagt aaatgtatgt ggttgtgtat aaggtattgt cacagaattt      480
cccttctctt taaaattatt cttttgaggg gaattttgca ttcgtgctaa ctgactggca      540
tgtacagatc gggagccttt tctattttct ctgattgctt tagattttct gtatcaaaac      600
ttgaacagat cttgagcagc gtttagtact tttatgtaca acctactggt cttgagagtc      660
tctgatggtg aaattggact aagttagatt atgtaaatct agagcccttt gagttagtct      720
atcttttctt tttcagactt cacagcagca aatgtttatc acctcttgaa aagaagcatt      780
agtgcttcaa ttaatccaga agatagtact ttccctggta agtataataa actcctcttt      840
tctctggcac agcatttgta ctggaaatta acttaattaa tttggaccct aaggagtaca      900
aggaaatact tcaaaaaaaa aaaaaaaaaa                                       930
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<210> 1538
<211> 580
<212> DNA
<213> Homo sapiens
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894

<400> 1538

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ggcacgagag aaggtgggac cccagcccaa gcacttcccc attgcagcct ggcatgaaat      60
ctttgccttt tagtgggggat cactcctgcc cgagtcctgg ctgtggtggg gactctgcaa     120
gttgctaacc cagcgtccat tctctttcct ccgtactaac agaaccccgg tgcctctgcc     180
cagttccaat agcgggcaga cgagagccat gtcctgggct cccttgcagc ccgggggtgtg     240
cagctgtggc gtggaggtgg gtggtgctgg gagagacttg cagggaagct cctgtgaagg     300
ggactcagct gccacatgca ggacccttcc cctttgcctt cttcctgcct ggaacatgga     360
tgtgatggct ggtgctggga cagctgtcct gagagcgtga ggaaagggtc acaccctaag     420
gacagtggag cagaacacag gaaggaccct gggcctttgc tgacgcagaa cgcgggaagg     480
accctgggcc tttgctgaca taccagcccc agactactta aattcagctt ttttttttaat     540
gtgagaaaat aaatgcaccc ctctctggtt taaaaaaaaa                           580
```

<210> 1539
<211> 1224
<212> DNA
<213> Homo sapiens

<400> 1539

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ggcacgaggc gcggaaggcg ggcacgcggg ccatggctcc ctgggcggag gccgagcact      60
cggcgctgaa cccgctgcgc gcggtgtggc tcacgctgac cgccgccttc ctgctgaccc     120
tactgctgca gctcctgccg cccggcctgc tcccgggctg cgcgatcttc caggacctga     180
tccgctatgg gaaaaccaag tgtgggggagc cgtcgcgccc cgccgcctgc cgagcctttg     240
atgtccccaa gagatatttt tcccactttt atatcatctc agtgctgtgg aatggcttcc     300
tgctttggtg ccttactcaa tctctgttcc tgggagcacc ttttccaagc tggcttcatg     360
gtttgctcag aattctcggg gcggcacagt tccagggagg ggagctggca ctgtctgcat     420
tcttagtgct agtatttctg tggctgcaca gcttacgaag actcttcgag tgcctctacg     480
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atgtccttgt tggcctaact gtgctgagcc aagtgccaat ggatggcagg aatgcctaca     600
taacagggaa aaatctattg atgcaagcac ggtggttcca tattcttggg atgatgatgt     660
tcatctggtc atctgcccat cagtataagt gccatgttat tctcggcaat ctcaggaaaa     720
ataaagcagg agtggtcatt cactgtaacc acaggatccc atttggagac tggtttgaat     780
atgtttcttc ccctaactac ttagcagagc tgatgatcta cgtttccatg gccgtcacct     840
ttgggttcca caacttaact tggtggctag tggtgacaaa tgtcttcttt aatcaggccc     900
tgtctgcctt tctcagccac caattctaca aaagcaaatt tgtctcttac ccgaagcata     960
ggaaagcttt cctaccattt ttgttttaag ttaacctcag tcatgaagaa tgcaaaccag    1020
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gctgtttgaa actctccatt ccatttctat accccacaag ttttcactga atgagcatgg    1140
cagtgccact caagaaaatg aatctccaaa gtatcttcaa agaataaata ctaatggcag    1200
aaaaaaaaaa aaaaaaaaaa aaaa                                          1224
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<210> 1540
<211> 1448
<212> DNA
<213> Homo sapiens

<400> 1540

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gaattcggca cgagttcagt aagaataatg ttttttggctt tcacatatac tcagtttaag      60
tgcttagtat taataacaag ccatgaaggg aataaattcc tcttcactga gacatagact     120
tkggaataaa agacatttta actgatgtgc acaattatta atctagtgga taagatggat     180
ttaaaaggaa gaacaaaatg ttcccagtac tttttactgt ctgtggtttt attactatct     240
atgggcatag tgggaagcat cattgagact ttagggaaac tataaaagtt ggaagggtgg     300
tggcatcagg ggttggatgc tggttctcaa gttcctagct ctgccccttg ttagtcattt     360
gagttaaata attaatggga atatctactt cacaggatta tgaggaatcc taagggggtgt     420
aatccatatc aaacttttag aaaccagttg ttttattacc tgggaaaggt aakraagggc     480
cagacttttt atactactgt tagtatttaa atttgggata gtctggatgc cacctaatac     540
agttactatg aaattaacaa ggtaactaag gaagttgata gtaccagtat tatctattgc     600
tatgtcctaa attaccatag atttagtggc ttaaaacaaa tgcgtctcag tttctgtctg     660
arcatggttt arataggtcc tttagaaagc tcatggtctc atctgcattc tcacctggtg     720
atttggggaag aactcatttc agcctcactc ggctggcaga attcagttct tgccactgca     780
ggactgartg tccagacctc tcactggttg tcagytggag ccccccgctt agttccttgc     840
cagctgggtg ctccctgcat ggcctggctg ctgactggac cactgacatg attactgtca     900
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ctaccagcaa gtgtcgagag ccaagctgcc agcaagaggg gtcttttcag gtcctgccca      960
tatccaaggg gagaggctca tacgaaggat tggataccaa gargtgcggg tggggctaat     1020
gggaaggcac ctaragtttg tcacagcttt tttttttttaa ctgaatctct ttaaattggt     1080
cgtctcsccc tacaatgcaa atgctttgtg tacaagtaaa aagaaaaatg gctctcacaa     1140
tatgaaaaac cctggctggg cactgtggct tatataaacc tgtaatccca gcactttggg     1200
argcccargc gggtggatcc cttgaggtca ggagttcaag tccaaccagg ccaacatggt     1260
gaaacaccgt ctttactaaa aataaaaaaa ttagccaggc atggtggcat gcgcctgtgk     1320
tcccagccac tcgagagatt gaggcaggag aattgcttga acctgggagg tagaggttgc     1380
agtgagctga gttgggccac tgcactccag tctgggtgac agagtaagac tccacctcca     1440
aaaaaaaa                                                                1448


<210> 1541
<211> 1143
<212> DNA
<213> Homo sapiens

<400> 1541
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gtggagctgg atatgcaaaa aatggttccc ctacttcttg gtgaggttca ctgtgatata      180
caacgaacag atggcaagca agaagcggga gctcttcagt aacctgcagg agtttgcggg      240
cccctccggg aaactctccc tgctggaagt gggctgtggc acgggggcca acttcaagac      300
tccgtctcaa aaaaaaaaaa aaaaaaaaag aagtagagac agggagacag ggtctcactg      360
tgttgcctag gccggtcttg aactcctggg ctcaagtgat tctcccacct tgacctccta      420
aattgttggg attacaggtg tgagacagtg cacctggccg aaatagctca agtttctgaa      480
aaacaaatct gaatctattt gttattctta gcgtcactgg tctggctttc agaattaaca      540
tacaaggttg ccacacctag ttctgcccag ctttatgtct tttattccag tattccacca      600
aagtttgttt tcctgcattc cagttctcaa gtcttaagat aaagattgta cttgacagtt      660
tagtatatcc ataaaactat ttgaggtggt taaggttctt gggttcattt tccttaatac      720
tttgctgaat attgtagatt gtaggcaatg aaaaagtcta ctaaattagg aaaaccttga      780
ataattaggt atcctaggta agagcccccta aacatcaagc aatctgtgag tctgtaaaga      840
aataaatatt ttttggatta ttcttatcta attccacccc tgttggaaga tgatttctttt      900
gttctttgca actatggaag ctgtgaaaat catcacaagt gcctctgaaa gcgagtgtta      960
ggttggttag agggtttaat attttctgca atggtttgta ggaattttaa taaatgtagt     1020
atattttctg agatgatttt gtaaaagtac tattttaaat atcaaatcaa ccaataaatt     1080
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aaa                                                                     1143


<210> 1542
<211> 1589
<212> DNA
<213> Homo sapiens

<400> 1542
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aaccaccgcg cccggccgac agtgattttt cataaaggtg ttccctttgt tctgggattt      180
ttagccttca tacatttttta ctgttaggca tttcctttttt cagatgatgg tgataatagt      240
taaaaaaaatt ttattgatag tattaaggga gtccactacc ttgtgtcaga ttccctgttt      300
ctttttgaag cccttgaaat gaagtttagg gaccactgat ctagaattct ctttatgctc      360
ctccactacc cattaacccc actctatagt ctgccttttc gctttcttct ctcctccctt      420
ctaamcactt cgtagamcac tgtgttttct gttcatgatt gaccttcaaa ttgccaaatc      480
ctttggyctt ataamccgtm tgtacttaac caacactctg ttgttaacaa atccttcaaa      540
actgttttct tttgcttccg ctctgttttt cctgtcatcc acttatcact tttcttcata      600
tgttttctttt cttttgttcc cagttgttat tatgtggggt tctggttcta tttttatgttc      660
tcactgtata ttcagaatca gatttttagc taccatgtac catcttaata atacctagca      720
tttatttact ctttcctaat tgttatttca gtgcttcagt atttcagtat tcatttaatt      780
cattcagtat tcatttaatt ctcaaaacaa ctcagtgagg ttgatacagg tataattggt      840
gtcttttttt tcttttttct gacactggca tatcgaggcc caaaggttaa gtaatctgtg      900
caactaggag gcagtagaac tgggatttaa acttagactg cctgtagagg ccatgttctt      960
aaccactact agattttttgg cgtccagatg tcccttgtat ttctaacttc cgtttagttw     1020
```

                                                             896

```
ttctacctcc aattcaatac atccattcag ttaatctcaa gtgcctgcct ctttcccttg    1080
caaaacacac ttgctcattc tttattcctt gccacattaa agktaacact atcctcccca    1140
tcgctagkac tatagaggyc attgaaccyt cccctgcgt atggcctgtg agttttattg     1200
attccagcat gattatttgg tgatatttga gtgcgatttt gtgctagatc ctgggtgtat    1260
aatgatgtat gagacacaga ctttgtcctc agggagctta tactctagaa ataatttttt    1320
tttttcaaga gagcgtccta ctctgttgcc gaggctggag tgcagtggtg ccaacatggc    1380
ttactgtagc ctcaggctcc cgagctcaac tgatcctcct gctgcagcct cccgagtagg    1440
tgggactaca gacatggact atcacaccaa gctgttttta tttttagttc aggtgggttc    1500
tcagtttgtt gcccaggagt tggagaccag cctgggcaac agtgagaccc tgtatctaaa    1560
aaagaaaaaa aaaaaaaaaa aaactcgag                                       1589
                                                                      1589
```

<210> 1543
<211> 831
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (53)
<223> n equals a,t,g, or c

<400> 1543

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ccatccctct gtcaccaatc cacagtgggt ttggggagga ggcatggcca acatccactg    180
ggctgcacag acagttttat tactacccca cctggctcct gccttctggg gccctgcagc    240
ccatgaatta atccctttcc aggctagcct ggggtacatc catccccttt ggctcctaac    300
ccatggagtc aagcctcggg cacatttctc ctaccagcct ggtttgggcc atatctatgt    360
aatgcttttg ccttcattta cttaggttgc tcccttaaac aggctcacat tttaaacata    420
acctctgcct cctaagcaaa tacttatatt cataaattac tcccacctga accaccacca    480
ctgccaccac ccacaggatt cctgggcttc cttgcagcat agataaaagc ttttttgggc    540
atccacttac caggcactgg gtgggagcag gcagcagggc acatcctccc tccttggaag    600
caatatttac tcagcaattc tccactcagc agtgtaaatc actgtggctt cccagcaggc    660
atatgatctc tgcctggtcg ggtttctctc ccttttccat gactgaatct gaagctcaag    720
ccccttttccc cacagcctct cccacatatg cctggaaact gaggtctggc tcatccttca    780
gggagctcca tgcttccctg gtaaggtaaa aaaaaaaaaa aaaaactcga g             831
```

<210> 1544
<211> 784
<212> DNA
<213> Homo sapiens

<400> 1544

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ttggacccat ataaaaacgc ccagctgtac cctatgagga ggatataaaa atgtgagatg    180
gtagttgaca ctcggaggac attcatatct ccaaacccaa ccttatgaag ttggccacag    240
caagcatgtt ggaaactaga accaggggtt tcatatcaag ccatttgctt aggtctgtat    300
ctcaaaagct ttaaatacaa cttttttttgg tgccctcttg ataaggagtc ttatactgag    360
ctcttcttcy ctttwatagc tggtccaycr gaaagattaa attaaacgtt tggccacatg    420
gacagttaat ccttagatca cccagttgga tggttcattc ctgctatgtt tggtttgatt    480
tttyattttt ggaaacaaa tagtgagtca gtctgctttc cctcccttttc tctgcctcac    540
cactccttct ggattctctt agatgctctg gtcatactag gtaaacagta tttttcttaa    600
aattttcctt gagccatgac agaatcatga gagagctccc ctggctctga tacttaatgc    660
ccccctctaa aaagaaaggt ctatttgagg ctattcactt ttgtcatctt gaaagagtct    720
ctgagtctta cctagcagga atattttgtt tcttttccta aaaaaaaaaa aaaaaaact     780
cgag                                                                 784
```

<210> 1545
<211> 1178
<212> DNA

<213> Homo sapiens

<400> 1545

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tcgactgcag ggccatggcc tcgctctggc tggtcagctg ggacttgctt ttactgctct     180
cgcatgactg caggctggcc aggatctggc tctggatggc ttggacccag gcatcccgct     240
cctcatacgt cgtggcttca aagtgccatg tttggccagt ggcagacaca atcataaagt     300
tgttggtgct tttcttcttt aggtgtttct ttttattggc atgaggagag gggggcgggt     360
tgagcttggg gctggtggtg ctggagatac tggggctgaa gcatatggag tcacccagcc     420
cggtgtccat gtccttggat aggccattgc ttttagagct ggagatgggt gcacaggccg     480
atgtggctag ggatggccac tttcctggga ctttgatggt agatgtccga aggtcaatct     540
cttttttatg aatattcttc atataatcac ctaagcttga ataataggtg agcacgccat     600
tggaacacag ggtgacgtat ttcttttttcc atgtcttcag ccatttccca cttcgcttta     660
agagcatgcc ctgtttaatg gggatggctc tgccgctccc gatggtgtca gcatgattct     720
ccggggcttt cctctctttg tctgggtcac tccctttctc agatgtaaac aggttggacc     780
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tcccacctcc atttctgttc ttcgtaatgt gcacggtgga aacctgtgtg gaacagaagg     960
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ctttaaaaa gatacatttt ctgggccagg catggtggct cacacctgta atcacagcac    1080
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```

<210> 1546
<211> 1579
<212> DNA
<213> Homo sapiens

<400> 1546

```
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agagaagcat atatttccag ccaccttctt tctatgtctc tgctcaggac ctgcctcata     180
ttgagaatgg tggtgtggct gtcctcactg ggaagaaggt agtacagctg gatgtgagag     240
acaacatggt gaaacttaat gatggctctc aaataaccta tgaaaagtgc ttgattgcaa     300
caggaggtac tccaagaagt ctgtctgcca ttgatagggc tggagcagag gtgaagagta     360
gaacaacgct tttcagaaag attggagact ttagaagctt gcgagaagat ttcacgggaa     420
gtcaaatcaa ttacgattat cggtggggggc ttccttggta gcgaactggc ctgtgctctt     480
ggcagaaagg ctcgagcctt gggcacagaa gtgattcaac tcttccccga gaaaggaaat     540
atgggaaaga tcctccccga atacctcagc aactggacca tggaaaaagt cagacgagag     600
ggggttaagg tgatgcccaa tgctattgtg caatccgttg gagtcagcag tggcaagtta     660
cttatcaagc tgaaagacgg caggaaggta gaaactgacc acatagtggc agctgtgggc     720
ctggagccca atgttgagtt ggccaagact ggtggcctgg aaatagactc agattttggt     780
ggcttccggg taaatgcaga gctacaagca cgctctaaca tctgggtggc aggagatgct     840
gcatgcttct acgatataaa gttgggaagg aggcgggtag agcaccatga tcacgctgtt     900
gtgagtggaa gattggctgg agaaaatatg actggagctg ctaagccgta ctggcatcag     960
tcaatgttct ggagtgattt gggccccgat gttggctatg aagctattgg tcttgtggac    1020
agtagtttgc ccacagttgg tgttttgca aaagcaactg cacaagacaa ccccaaatct    1080
gccacagagc agtcaggaac tggtatccga tcagagagtg agacagagtc cgaggcctca    1140
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tacggcaaag gtgtcatctt ctacctcagg gacaaagtgg tcgtggggat tgtgctatgg    1260
aacatcttta accgaatgcc aatagcaagg aagatcatta aggacggtga gcagcatgaa    1320
gatctcaatg aagtagccaa actattcaac attcatgaag actgaagccc cacagtggaa    1380
ttggcaaacc cactgcagcc cctgagagga ggtcgaatgg gtaaaggagc atttttttat    1440
tcagcagact ttctctgtgt atgagtgtga atgatcaagt cctttgtgaa tattttcaac    1500
tatgtaggta aattcttaat gttcacatag tgaaataaat tctgattctt ctaaattaaa    1560
aaaaaaaaa aaactcgag                                                 1579
```

<210> 1547
<211> 954
<212> DNA
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898

<400> 1547

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gtgtgtgttt tgtaccttca gtcccttgtt attgttccgt atattacctg taagcagata   180
ctgtatttta ttttagccta tttgacagaa cacatcactc agaaaaagtg aagtttcaga   240
gcaaacagtg aagaaatcag tgtgattgta gacaaaaagt cggttcacag aacggagcag   300
cggggagagg aagggaaaag cttcatagtt tggtgcttat cacatcaaga gattggtaaa   360
tttctgagga aagacaggct aatggggcac tgaaatggaa caactccttt aaacgtgcag   420
cctttttgaat ttttcctcaa aaccaagaag ttgacctctg agctgtcagg tgaccactgt  480
gtgcaaaggg gatggattct cttgtcagta gacggtcttc tccatgaagc gagagtagga   540
agtgtactgg aatggccaag tgggactgct tcagctgacc aggttctttt aaaccgtagt   600
catgctttcc cactaactct taaatcctta tgcttagaaa attgaggata aggctgggca   660
cagtggctca ggcctgtaat cccagcactt tgggagacca aggcgggtgg atcacaaggt   720
caggagatcg agaccatcct ggctaacatg gcgaaacccc gtctctacta aaaatacaaa   780
aaaatagctg ggcgtggtgg cgggcgcctg tagtcccagc tactcaggag gctgaggcag   840
gaggatcact tgaacatggg aggcggaggt tgcagtgagc caagatggcg ccactgcact   900
ccagcctggg tgatggcgtg agactccatg tcaaaaaaaa aaaaaaaaaa ctcg          954
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<400> 1548

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ctaaaaaacg tttcacacct cctatttatc aacctaaatt taaaacagaa aaggagttta   180
tgcaacatgc ccggaaagca ggattggtta ttcctccaga aaaatcggac cgttccatac   240
atctggcctg tacagctggt atatttgatg cctatgttcc tcctgagggt gatgcacgca   300
tatcatctct ttcaaaggag ggactgatag agagaactga acgaatgaag aagactatgg   360
catcacaagt gtcaatccgg aggataaaag actatgatgc caactttaaa ataaaggact   420
tccctgaaaa agctaaggat atctttattg aagctcacct ttgtctaaat aactcagacc   480
atgaccgact tcataccttg gtaactgaac actgttttcc agacatgact tgggacatca   540
aatataagac cgtccgctgg agctttgtgg aatctttaga gccctctcat gttgttcaag   600
ttcgctgttc aagtatgatg aaccagggca acgtgtacgg ccagatcacc gtacgcatgc   660
acacccggca gactctggcc atctatgacc ggtttggccg gttgatgtat ggacaggaag   720
atgtacccaa ggatgtcctg gagtatgttg tattcgaaaa gcagttgaca aaccccctatg  780
gaagctggag aatgcatacc aagatcgttc ccccatgggc accccctaag cagcccatcc   840
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agaataatta gtgtttataa gacatttaag aggccctttt tcatatactg actcactgat  1500
gaatcagcat ttgcatttta tggaaaaata taaatccaaa gaaataaaaa aaaaaaaaaa  1560
aaa                                                                1563
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<400> 1549

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cccacgcgtc cgcaggatgg agtgcagtgg cacggtctcg gctcactgta atctccacct    60
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ctcaggttca agtgattctg ctgcttcagc cgcacgagta gctgagatta ctggcatgtg    120
ccaccatacc cagctaagct cttttctatt aaattttttt tctgagtttt caactctttt    180
ggttttaact gccatttcta tgttctgttt ctctctggta acctacgcct agacctcctg    240
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gcagccattt agcacacttg aacatacaat tttactcyta ttttctattt gtccattttc    360
attctcaact aagttggaag ctgcctaggg ataggagcga tgtataattc ccctcactga    420
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aacacagtga gaccctatct ttacaaaaaa ttttaaaaat tagctgggta cggtagcacg   1680
tgcctatagt tccagctact cgggaggctg aggcaggagg attacttgag cacaggagtt   1740
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tctgtctcaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaa                     1847
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<210> 1550
<211> 1391
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (782)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (788)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (789)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (791)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1019)
<223> n equals a,t,g, or c

900

<400> 1550

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wtttttgttt tgctttgttt tttgtaaatt tcactctgcc atctctgttt ttaattagta       180
tatttagagt gcttatattt aatgtaatta ttgatatctt agggtttata tttgccattt       240
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tgtggattac ttgaatatac ttttaaattc cattataatt tatctatagt gttttatatg       360
tatttctttg taggcktttt ttagtagttg ttcttcatat tacattatag ataacttatt       420
gccatctatt ggcatctgat cataccattg tctgtgaagt gaaaaacact taccttctkg        480
cagattcttt tggtcttttt tatttagaag ataattatct taaatatttc atctttatat       540
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tnttttttnnt nagtttttgtt ttaaacgtga agatttcttg atttccccttt cattcttaaa    840
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actctcattt gaattcccat ttttctatca ttgcctctaa gatttttta atccaatana        1020
naatacaaag ttttagcaaa aacatggtaa attccagcaa gaaatagaag atacaaattt       1080
gttttattta ggagttatta tatatttatg gcatgttcat cctgactagg gaaatcgcaa       1140
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agatataaaa gacaatcaca tggatatttt caaattataa atatgataac tgaaataaaa       1260
aatctaaagg agggctcaaa agcaaaatgt aggtgatagt gagaagtagc aaagaacttg       1320
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aaagggcggc c                                                           1391
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<210> 1551
<211> 1272
<212> DNA
<213> Homo sapiens

<400> 1551

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tctgcccaat tcccgcacct ctggaaactt cattcacatt tggcacagat gagccactcc       180
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aaaaaaactc ga                                                          1272
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<210> 1552

<211> 2008
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1977)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1978)
<223> n equals a,t,g, or c

<400> 1552
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tgcggcgtct cctatgtcgt ccaggaacca ggtgactatg aggtctccat caagttcaat     180
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aacaccctga atgccggctc gggggccttg tctgtcacca ttgatggccc ctccaaggtg     660
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ttctagggga ctttgcaca tgtcatgcag ctcagctggg agctgcttag gtggaaaact    1920
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<210> 1553
<211> 772
<212> DNA
<213> Homo sapiens

<400> 1553

902

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tgtacctcat gtacacttgg aagcttcagg gacttagcac tggtcatgcc agcctctaca     180
gatcacatct ctgtctataa ttgggtctcc atggtaatga gaagcagaaa gtgctgaagt     240
agcgcactat gtaaggactg gcaagagaaa atactgtcgc ggcctctaca ggcatagcat     300
tgaatcccca tggtgcccaa gaagcccgag agaagcacgc tgtggtgtag agcaggagac     360
tgaggacacg gacttggcag atttattagc agcaatattc taagatgaac caaatttaag     420
agtttgtaag tgctcttttc aattggaaaa gacctttgaa attttttttt ctttt ctttt     480
aggaggccag atgctccagt gcctgatggc gaaagtgaga aaactgtaga agaagttca      540
gatagcgaat cttctttttag tgattaagct taattttgat aagaattaca tatgcatgca     600
taggggtaca tttacattct gtaagagatt gagcctgaac tctcttagtc ataaaaacat     660
caaatggcca catgtccact accaagcttc ttctatgtta aaaaaataat aataaagcag     720
ttttaacctg ccaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa             772
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<210> 1554
<211> 822
<212> DNA
<213> Homo sapiens

<400> 1554
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atgtactggg gacctttggg tttaaccagt gagattgtct tgtttatcct gttgcattta     180
gccttccagc ttatggaaaa atacaaattc aaattctaac actgctggat ttatgatatt     240
taaggtttct attatatcag ctgcctggat ggagcacaga aacagcgtag tacaatatgc     300
tatgggtata ttcatgacca aagtttacaa tgtggaagga gaatagaaat gcaagaggtc     360
agttggggaa ttagctgctt gtgttatata actccttaaa agtggaaaat gatcacaagt     420
aaatgtgagt agtgacagtt ctcttccatt tcctttcttc aggtaaggaa aacacactta     480
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tgtgtatatg tcgtgttgtt gactgatttt tttgcttttt actcctgatg tgttttgtgg     600
gtgagaaggc aagcatgtaa ctaagataca gaaaagacca agatgtagtg gggcacagtg     660
gcttgacgcc tataatctca actactcaga aggctgaggt ggaaggattg cttgaggcga     720
ggagtccagg ctgcagtggg ctatgattgc accgccacac ttgctgcact ctacccttgg     780
gggacagagt gaagctctgt ctcaaaaaaa aaaaaaaaaa aa                        822
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<210> 1555
<211> 1488
<212> DNA
<213> Homo sapiens

<400> 1555
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cccaattatt cttatctcaa taaatgaaat gacaccacag ccatcaacca gggatcctgt     180
acctcacctt ccacatccaa actatcaaaa gctcctcctg ttttatgccc aatcagatat     240
cgagtcattt cacctctttc tgtctcctct gctacttctc tcagacatgt tgcttcaatt     300
tctcacctga actactacat tagcctccta cctggctctg ctttcattcc tgcctccctg     360
cagttcattc ttacagagaa tctagaaaaa gctcttcaaa agcaacaatc agatgtcact     420
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gaattggcca tcccttgtgt ttgtgtgtga cggtcatgtg ggggtgcaaa tggggaccgt     660
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agtaccacta aattccagat aaagcaaatg taatttaggc ttctagtttt ttttcacaga     780
ttgggatctt gagctttcaa aaaagattat caaacaagga aacaaaccac cgtgagtgaa     840
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tgaaaagag ctaaagaaaa ccttcagtaa taaaaaaaaa ttatcaaaaa atttagtgga    1080
taagctttt tgtaatggac taattaatga actggaaat aaaactaaaa tagtttcatg    1140
caatggagca cagacaaaga gatggaacta taaggaagag aggttaataa gtttggaggg    1200
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903

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      cagaataagc aagcctaact aaagcctatt tagagcgtga aaggcaacaa aaatatgcag    1260
      aatggagatg agacaatgtt taaagagatt gtggctcaga attttтcttt ttттttaagt    1320
      gaagagtttt atcttttgtg tttttтgttt gtttgttttc tttgttttttт ttтttactgt    1380
      tattatactt taagttttag ggtacatgtg cacgacgtgc agcttcgtta catacgtata    1440
      catgtgccat gttggtgtgc tgcacccatt aactcgtcat ttagcatt               1488


      <210> 1556
      <211> 1383
      <212> DNA
      <213> Homo sapiens


      <400> 1556
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      gtccaatact gatttaatga gcttgggttt acacattatc tcttgaagaa aacaaatgaa    120
      cctttgtgtt ccaaagcaat ccatgtттaa agggaaaaaa ttatgcataa ctctgcccag    180
      cttcacagta acctttggca ggtgccttag gtcctctggg actcttttcc ttatctgaaa    240
      aatgaaggac ttggatcagg tgaatggttc ccagctctgc aacttatgtg gctcctcaga    300
      ggcacacaag ctcttttcca ttatttgcca aataatggag gccctgtctt taactgcagt    360
      acaactacac aaaatacttg aaactacagt cttcctggtt tттggttgga actgaatcag    420
      tgcactctag caacacttat ttcttgctgt tcgtaggctt cattatgtgt ttggttaatt    480
      ttttaaaacm acawtwacwt atyccataat attwcmgctt aattggmara ctgtttcagt    540
      ctataggatc tgcaggaagg aggagtaata agggattттt gactgagctc ttatggaaca    600
      gagtctctct aggccccctg tcatatctgc ccttctgggc cctggggaaa agttggcatc    660
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      ccttcagccc actcaattca gaggctaggg gctgaaagaa gcttctctac aactggctgt    780
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      agaatttacc tgtaaacatt tttgtctgaa gaatttggat gtaagtgagg gctgggcctc    960
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      cctgagtcca ggagtttaag accagcctgg gcaacatagg gagaccatgt ctctacaaaa   1200
      aataaaaaat tagccaggca tggtggtgtg cacctgtagt cccagctact caggaggctg   1260
      aggcaggagg atctcttgag cctgggaggt cagactacag tgagcaatga ttgtgccact   1320
      gcactccagc ctgggtgaca gagtaagact ctgtctctta aaaaaaaaa aaaaaactc     1380
      gag                                                                1383


      <210> 1557
      <211> 748
      <212> DNA
      <213> Homo sapiens


      <400> 1557
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      tattaatgct tttacgagtt agaagagttg ggataatttg ccatctggag tttctctgcc    120
      ttgctgatct gagctcagac ctgccaattt accagagata attgataaca ccctgtaaca    180
      gctgagtaag tagattcttc tgttттactg ctттtaaaaa aagtttaaag ttттaaaata    240
      gtataaactt taattgggtt ctттaaattt tgttgttgaa taatgcaatt attatgatat    300
      tttgtgaata tttgtaaata atgggattct ggaataaatt aatccccgat gatagaaaag    360
      agttaatgaa cactтctcc atacataaca ctттagcatt caagaaacat aggacttaaa    420
      tacatatatt aaaaatтtag gccaggtgca gtggctcacg cctgtaatcc cagcacttтg    480
      ggaggctgag gcgggcagat cacctgaggt caggagtттg agaccagcct agccaacatg    540
      gtgaaatccc atctcggcta aaaatgcaaa aattagccag gcatggtggc aggtgcctgt    600
      aatcccagct actctggagg ctgaggcagg agaatcactt gaacctggga ggcagaggtt    660
      gcagtgagct gagactgtgc cactgcactc cagtctgggc gacagagagg ctctgtctca    720
      aaaaaaaaa aaaaaaaaa aaaaaaaa                                         748


      <210> 1558
      <211> 1694
      <212> DNA
      <213> Homo sapiens
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904

<400> 1558

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gagagaggta gccatttcca aaagaaaaga tttctatctc agattatctg ggaaagaggc      180
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tctgtgtccc ctcctgctcc tttcactccc acctgggagg ctctgagcag gccagggtcc      420
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cctcctccct ctgctggccc gagcctcctc tgctgctagg ctgccctggg gaaggactgg     1440
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gtctgccctt cctttagtgt agccagtatc aaccaagggc ctactgagtg caagatatac     1560
agcctgatgc ctaataattc catatagcag ggagaaatgg aacccaggta tcctccttgc     1620
ttcagtcctg gctgttgaaa agctwacagg caggttaggg aggaagcaca cacaaataca     1680
aaacaaaaaa aaag                                                       1694
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<210> 1559
<211> 1572
<212> DNA
<213> Homo sapiens

<400> 1559

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attagctctg tcggcctcca gcttgcacac ggcagactgt gggactttct agcctccata      180
attgcatgag ccaatccctc ataataaatc tgtttctatg tatctatatt ttgttggttc      240
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gtttagagca gctttattca tagtttatca aaatgtggaa gcaatcaagg tgttctccag      360
taggggaagg aataaataaa ctgtggtatc tccgtaaaat gggatgttat tccacactaa      420
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aggcgggagg atcacttgag gtcaggagtt caagaccagc ctggccaaca tggcaaaacc     1320
ccatctttac taaaaatatc aaaattagcc aggcatggtg gcatatgcct gcagtcccag     1380
```

905

```
ctacttggga ggctgaggtg ggagaatcgc ttgaactcga gaggtggaga atgcaatgag      1440
ctgagatcac accactgtac tccagcctgg gcaacagagc aagagtccgt ctcaaaacaa      1500
acaaacaaaa aaaaaaaaaa aaaactcgag gggggyycc gtacccaatc gccctgatga      1560
tgtatggtat ac                                                          1572
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<210> 1560
<211> 1265
<212> DNA
<213> Homo sapiens

<400> 1560
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<210> 1561
<211> 3332
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<400> 1561

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atttgataaa tagttttccc ttttttaat gaaaagatta tctgattgga ttgacctgcc   180
tactaatttt tgctattaac ttttcattc ttaggcaata agcaacaaag accagcatag   240
catatcatat actttrtctc gggcccagac tgtggtggtt gaatatactc atgacagcaa   300
cacmgatatg tttcagattg gccggtcgac tgaaagcccc attgattttg tagtaactga   360
cacggttcct ggaagtcaaa gtaattctga tacacagtca gtacaaagca ctatatcaag   420
atttgcctgc agaatcatat gtgaacggaa tcctcccttt acagcacgga tttatgctgc   480
aggatttgac tcatcaaaaa acatctttct tggggagaag gctgccaaat ggaagacatc   540
agatggacag atggatggct tgaccactaa tggtgttctt gtgatgcatc cacgcaatgg   600
gttcacagaa gactccaagc ctggnaatat ggagagaaat atcggtgtgt ggaaatgtat   660
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gcaatttaat ctagattatc tatttttctc ccatgataac taatctgttt ttagtatcag  2100
cagcatttgg caagtttatt ttttggatat aaactgtggt tcatctgttc actgtttcta  2160
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907

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tgcttttgga aaaagaaatg cttaattaat tattctgtat ttggccttat tcgggcatta   2280
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cttaactctg ggtttgaatc ctaaggagat tgccacagtg agacttaagg aaatgtttgg   2400
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aattttatt tgcaattaat ttatttaaac taagtaaata cttttcaaaa tacataattg   3120
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gtgaacaact ctattccaca ctccaaaaat actcatttga aatagatgaa gagtttgcat   3240
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<210> 1562
<211> 1314
<212> DNA
<213> Homo sapiens

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gcattcgatg tgctggaatc cacaggaatc tgggggtgca catatccagg gtaaagtcag    180
ttaacctcga ccagtggact caagaacaga ttcagtgcat gcaagagatg ggaaatggaa    240
aggcaaaccg actttatgaa gcctatcttc ctgagacctt tcggcgacct cagatagacc    300
cagctgttga aggatttatt cgagacaaat atgagaagaa gaaatacatg gaccgaagtc    360
tggacatcaa tgcctttagg aaagaaaaag atgacaagtg gaaagagggg agcgaaccag    420
ttccagaaaa aaaattggaa cctgttgttt ttgagaaggt gaaaatgcca cagaaaaaag    480
aagacccaca gctacctcgg aaaagctccc cgaaatccac agcgcctgtc atggatttgt    540
tgggccttga tgctcctgtg gcctgctcca ttgcaaatag taagaccagc aatacccta g   600
agaaggattt agatctgttg gcctctgttc catccccttc ttcttcsggt tccagaaagg    660
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ttctttcact gtatggatcc cagacgcctc aaatgcctac tcaagcaatg ttcatggctc    840
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ctatgcccca gactgtgtat ggggtccagc cagctcagca gctgcaatgg aaccttactc   1140
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gacagtcaat gagtggcgga aatggacagg cagcaaatca gactctcagt cctcagatgt   1260
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<211> 2545
<212> DNA
<213> Homo sapiens

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gcattcgatg tgctggaatc cacaggaatc tgggggtgca catatccagg gtaaagtcag    180
ttaacctcga ccagtggact caagaacaga ttcagtgcat gcaagagatg ggaaatggaa    240
aggcaaaccg actttatgaa gcctatcttc ctgagacctt tcggcgacct cagatagacc    300
cagctgttga aggatttatt cgagacaaat atgagaagaa gaaatacatg gaccgaagtc    360
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908

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tggacatcaa tgcctttagg aaagaaaaag atgacaagtg gaaagaggg agcgaaccag      420
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aagacccaca gctacctcgg aaaagctccc cgaaatccac agcgcctgtc atggatttgt      540
tgggccttga tgctcctgtg gcctgctcca ttgcaaatag taagaccagc aataccctag      600
agaaggattt agatctgttg gcctctgttc catcccctc ttcttcsggt tccagaaagg       660
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ttccggagcc agggagcaaa tcagaagaaa taggcaagaa acagctctct aaagactcca      780
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gcataatggg gagcatgatg cctccaccag taggcatggt tgctcagcca ggagcttctg      960
ggatggttgc ccccatggcc atgcctgcag gctatatggg tggcatgcag gcatcaatga     1020
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ctatgcccca gactgtgtat ggggtccagc cagctcagca gctgcaatgg aaccttactc     1140
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gacagtcaat gagtggcgga aatggacagg cagcaaatca gactctcagt cctcagatgt     1260
ggaaataaaa acaaaacacc tgtatggctg ccattctctt cagccctcgc tctcccctt      1320
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cctggcacca gcaccttaga agttgttggc agaaggcact taaactgtgg gagaagtgtg     1560
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gtaggatctg gctccgtggc tggaggacca accctatag tgggaatgca gagcttaacg      2040
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accctctccc catctgctct gggtatttt gttttgtt agttttaggt ttacaacaga         2160
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tgcctgtgta tccagggtgc tctgtttccc caccgttccc aggtgtacga ggcagagggc     2340
cgggacagct ttcctctcag tcattgttca ccccacttga aaattcagac aagaaaactt     2400
tgcttaaaag atttcatgtg tgggaaccac agttcctggc tgcctttctc ctgtgtatgt     2460
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<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

<400> 1564
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gaaagaaaga aaaagagttc cctaagtaag ctcctactgg gtgtcctcca ctcacatgga      180
gacagggccc tgcttttagg cacttactct tccagtgtct attgyataat atgttcagga      240
aggatcccag attcaaagat ttatagaatt agrgttaaaa gggatagata tcttgtttga      300
ccctgaaaaa attaaggaat atgcttgaga tattcaatgg cagaggctgg aatagatttt      360
cccaaatctc ctgatgtgaa gttctgtgtt tgtcaaacat gactgtgtaa aaagattaat      420
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tgcacaaaat tgaatgaaga gctgactaag caaggctgca ctgagaagga accagggtgg      600
tctgggctgt ggtagcggca gcagcagctt gcagatctcc cagcgctgat gctggctcga      660
ctcagacagg tctccactct ctgctgtctg tctctggctc agacaggaca ctttgtgtgg      720
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909

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ctgtttcctt ccacaaggcc tcagtgggag caagccagcc tcccacaggc ctctgagaca      780
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ccatgcagaa gcctatgtgt ttgttcccct gtggagatgt aaaaacactg atgcccaggc      900
ctaactccca gagactctga ttgaactggt ctgggctatg gagccgggac atttgcattt      960
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aaaa                                                                   1564

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<211> 914
<212> DNA
<213> Homo sapiens

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agaattcttc aggatctggg gaacctcaga gagtgctgaa acctgttggg acgttggatg      540
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tcatgaaata aaaaagttta gggatggcca ggcatggtgg ctcccacctg taatctcagc      780
actttaggag gctgagacag gagaattgct tgaacctggg aggtggaggt tgcagtgagc      840
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aaaaaaaaaa aaaa                                                         914

<210> 1566
<211> 2235
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1097)
<223> n equals a,t,g, or c

<400> 1566
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atgtactcat ggagttatgc agccacaatc ttagcgcatt ttcattaccc caaaaagaaa      180
ctgtacccat tatgcacccc gttcccctcc tccggtcctg gcaaccacga gtctactgtc      240
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cttcccacac tttactgtgc tgttgtcaag gtttatctat gtgttgggtg cagccacccc      360
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agcggggatg gacacgtgtt cattcactct tccactgatg ggcatcggga atgtttccac      660
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910

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tttctgtcta tcattaacaa ttctgctaca aacatacatg tacttctgtt ggaggggaca    720
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aaccagatca gctacanccc ccaggatccc cgagacctct gtggacgcat actgaccacc   1140
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gcgtaccacg ccgagaacta cagccctgag gacaacaggt ttgatctgcg accatttctg   1920
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<212> DNA
<213> Homo sapiens

<400> 1567
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<212> DNA

911

<213> Homo sapiens

<400> 1568

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<212> DNA
<213> Homo sapiens

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912

<400> 1569

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<212> DNA
<213> Homo sapiens

<220>

<400> 1570
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<211> 2399
<212> DNA
<213> Homo sapiens

<400> 1571
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914

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<212> DNA
<213> Homo sapiens

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<400> 1573

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<213> Homo sapiens

<400> 1574

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<211> 994
<212> DNA
<213> Homo sapiens

<400> 1575

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actgaaagga gggagaccag tgagtctaga ccaataggtg ggttaggcct cctgaatgcc   300
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917

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<210> 1576
<211> 793
<212> DNA
<213> Homo sapiens

<400> 1576
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<210> 1577
<211> 1482
<212> DNA
<213> Homo sapiens

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918

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<210> 1578
<211> 1336
<212> DNA
<213> Homo sapiens


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<222> (221)
<223> n equals a,t,g, or c


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     acactcgctt agcagcggaa gactccgagt tctcggtact cttcagggat gagtcatgtg     180
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<210> 1579
<211> 2253
<212> DNA
<213> Homo sapiens


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919

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<211> 1481
<212> DNA
<213> Homo sapiens

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<210> 1581
<211> 1268
<212> DNA
<213> Homo sapiens

<400> 1581
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920

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<210> 1582
<211> 1637
<212> DNA
<213> Homo sapiens

<400> 1582
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<210> 1583
<211> 2127
<212> DNA

921

<213> Homo sapiens

<400> 1583

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<210> 1584
<211> 1551
<212> DNA
<213> Homo sapiens

<400> 1584

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gtacatttt cagcaagaga gtcagtggct ttcctctgtt tgtccaaagg gtctacagtg   360
cagaacagtt tagcaccact tacctagagg accttttttt gtccctttcca ttgttaaaag   420
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cccaaatatt tatgccaggt cccagattca gagattgtaa ttatttcatg yagggtaggg   600
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catttcacat gagacctta catgacccac cattagccta cccccatcac cccagttttc   780
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<210> 1585
<211> 874
<212> DNA
<213> Homo sapiens

<400> 1585
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ctgcctgtga gcaaccaggg gaagctagct tggtgccgag tttacacagt gaatgttaaa        660
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gattaaataa aaaaaaaaaa aaaaaaaact cgag                                    874
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<210> 1586
<211> 942
<212> DNA
<213> Homo sapiens

<400> 1586
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<210> 1587
<211> 1124
<212> DNA
<213> Homo sapiens
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<400> 1587

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<210> 1588
<211> 1170
<212> DNA
<213> Homo sapiens

<400> 1588

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<210> 1589
<211> 1150
<212> DNA
<213> Homo sapiens

<400> 1589

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924

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<210> 1590
<211> 2612
<212> DNA
<213> Homo sapiens

<400> 1590
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gaggatggga cgggaaggag aacgtggccg gtgggtggag gatagcactg gtgcctggcc    360
ccatgatggc tgcaatgcgg ccacattctc agtgggtcat gtctgaatgc gagagcagct    420
gtgttctgcg agtggtgaaa caattgcctg ttgcattcta tttataggca gaggtaacta    480
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gaggtgggag cactcaccag gcagagaagt ccctgccccc actgcttgca gcccaacagt    660
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ctgtgtgttt gacgctctca gaacaggcct gcagcgctgt gagccttgga aggggggcctc   1140
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aaggcacaaa tgcaggtgca gcttccccat ccccactctt aaggcacaaa tgcaggtgca   1980
gcttccccat ccccactctt taggcacaaa tgcagtggca gcttccccat ccccactct   2040
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cagcttcccc atccccactc ttagggcaca aatgcaggtg cagcttcccc atccccactc   2160
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tcccagcact tttggaggct gaggcgggcg gatcgcgagg tcggggatc gagaccatcc   2400
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tggctgacac ggtgaaactc cgtctgtacc aaaaatacaa aaaaattggc cggatgtggt     2460
ggcgggcgcc tgtagtccca gctactcggg aggctgaggc aggagaatgg cgtgcacccg     2520
tgaggcggag cttgcagtga gccgagatgg tgctgctgca ctccagcctg ggctacagag     2580
caagactctg tctcaaaaaa aaaaaaaaaa aa                                   2612
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<210> 1591
<211> 1485
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1365)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1402)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1423)
<223> n equals a,t,g, or c

<400> 1591
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aggttttgaa caagtaatat gttcatgtgg tttaaaatgc taaagttaca acattataca       60
tagttaaaaa aaatctgtct tctaagtaga tactccattg tcctctgtag ggagaattgg      120
agttactagt ttcttggctg tcattctatg catttataaa cagttgcatt ttttttcccct     180
tatttttact agcatattat gtatactagt ttatacttcg actttcccat gtaatataga      240
atcttgagag attattctat actgtaacat aaaagagctt ccttgaaaaa atattcttaa      300
aatagaatat tccataaaat attctataaa atactgcttt gaatatttgc accactatct      360
ttttttcttt ttttttttga gatggattct cgctctactg cccaggctgg agtacagtgg      420
caccatctcg gctcactgca accccacct cccaaatcta tgatctcttt catatttgct       480
tacttttcta ttagattgtt gatccttcct cttactgatt tatagaagcc ctttgttagg      540
tgcattagct cattgaggta tgagttgaat gtatccagat ttataaattt taaaagaggg      600
atttacaaaa gtcctctaag tcttgcttta agttaatggt tagagctgtg aaaacctaat     ·660
taagtcattt cacacaatgt tctcccatga gaaaatccaa agtttgttta aaattcaaaa      720
tttaccattt taatcatttt aagtgtatag ctaagtggca ttaaatacat tcacaatatt      780
gtataaccac caccactttc tatttccaga agtttttcat cacccaaact acaactctat      840
taaagtaata actactcatt tccttcccgt cctcccagcc cctggtaacc tgtactctgc      900
tttctgtctc tatgaatttc cctactctag atacttcata taagtgggat tacacaatgt      960
ttttcctttt ttgtctggct tatttcactt agcataatgt tttcaaggct catccatatt     1020
gtaagcatac ggaggaataa tctattggaa tatttttata tagcatatta tttacatata     1080
aattccatat ggaggaataa tattcaattt tttgtgtaca ccacatcttg gttatccatt     1140
catctggtga aaaataattt gggcctaggc acagtagctc acgtctctaa tcccagcaca     1200
ttgggaagct gaggtgggtg gattgcctga gcccagaaga tcaggaccag cctgggcaac     1260
atggcgagac cccatgtcta taaaaaattt aaaaattagt tgggcgtggt ggtgtgcgcc     1320
tgtagttcta gctactcagg aggctgagat gagaggatca cctgngctta ggagatggag     1380
gttgcagtga gctgagattg cnccatgcac tccaacccgg gcnacagaga ccctgtctca     1440
aaaaagttg atgaacgcat acatattaaa aaaaaaaaa aaaaa                        1485
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<210> 1592
<211> 1566
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1013)
<223> n equals a,t,g, or c

926

<220>
<221> SITE
<222> (1020)
<223> n equals a,t,g, or c

<400> 1592
gaattcggca cgaggatttc cctgggccat taagaaaagt accttttaat gtgctcaaga   60
attcagggtt tagaaagatt tccatccaga ttggctcctt aaagaaaaaa gatgcggtgc   120
ataatttatt ttactttcag ttatctgcta acgcagctat gcaaaatgac tcatttattg   180
gggagtgggt ggtggcatta ggtaaagtct taccatattg tctattttga ctgtttcatt   240
cttaatagaa gtctacacat tgcctgcaat tgaggtataa ttttctttaa agggagtgtt   300
gtttcagata aggtagctgc gacctaagaa aggaataatt ctatatgatt ttaagtcttt   360
agggratgga agcactgtct tawtaattgg aaagtcccaa ctgatagcac tgacatawtc   420
atgtgctttc tttgcctgcc tgctcatctg cagccctgat cacagaagga agggagaagt   480
agataagaaa tagtagttat gaggatgaaa cgtgcacata taggagccct ctcacgttag   540
gcttggtttg gtgtctggag gcacgtgatg agaacagcag tggatctgtg ggctcatgtt   600
tccttactcc tgctctatta ggactccagt ctgaagggat gatctagtac caaccaggag   660
atgtttagaa gamcgasatg tttcctgaag tattctgagc tgtctcargt tgattacgtg   720
ctttcttatc ttagatggct cctggagagc tgtctgggta atatgctctc ccactttggt   780
aattttggat tttttgcara tgctttttgt aaaagaacac ctatgagtga ggcctatggt   840
tttggggttt gcagtgccca accagtcaag ctggtctttg ccttttttgt ggttggatat   900
ggaaagagtg gtcagtagat ttcccagtgc tgtactcatg ccattcagct catagtcaca   960
taggtttcca tatttgctaa taaaaataag aaaattccgg aaaaggggag tangttggan   1020
ttgtcaagtt gaactgtgaa tggtgtggat gagatattct ggggagagaa tggacagacc   1080
aggtttggct tagctactag ttgagtgtcc cttctagctc tctgggattt ctttctaatc   1140
tgtaaaatca cctatttgt tgaagtargc ttgcctgtcc tttcaattct tggacatttc   1200
agaacataag ctatgtgttt ttctggaaaa aaaaaaagga tatttgttag aattagaatt   1260
tacttgttat gaatctaacc ttcacacacc aaacccccag ctaagacagt aagttgcata   1320
tataattgta ataaatacta tgtaagtctg aaaggggaaa gagaacttga gtttgcgact   1380
tttcttataa tcttgaagaa gtaattccca gacttcagag tgtgtaagaa atcactagaa   1440
tgctagttta aaaaggcatg gattcctata ccccagttac acagttctta tggcctggga   1500
tagagcctgg aagtctgcat gtcacaggtg aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1560
actcga   1566

<210> 1593
<211> 1638
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1578)
<223> n equals a,t,g, or c

<400> 1593
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ttttcctgtt agcaggcaga aagaatccct cctggattcc agaataataa atacagtcat   120
gtgctgctta atgacgtttt cgtcaacaat gggccacata tatgatggtc caaagcacta   180
tactgtacat catctcattg gaaaacctta tgaaatagga gggcaactat catcataatc   240
atcttccttc cccccaccac caacttcagg gagtgaggtc ctgggaaatg aagggacact   300
atccatgtgc ttggatgtct ctatcctggt tccgtactct ttccgctatg atatactgcc   360
ttctatatat agataaaagt tcaattytct ttttcacaaa tgagaggaga atatgattga   420
gttttagtaa aattgatatc cagtaatact ataatgtatt tagatcaagt tagcacctaa   480
atagcaaacc tgcttgctct attaagctag tgattttca ctataggtgc taacaaccat   540
tacgtagcat ctattctcta aaattgttgc tatcggtcta gcagaggagc agtgcactaa   600
tgtgggtgca gatattatag aaaccagaat acatgggtga tgactgttcc actcaccatc   660
ttctcatatc tctggggatc tcattgtgga gtaaggggca taatgttagt atacctttta   720
gagatcaaag gggcaagtca gcatcagctg aaagttgaat cacctcatta aagaatttta   780
tatcccttc aggggggttga tttggaaagg aaaacagaca taagatttga atgtatcagt   840
gtggctactt gtgaacatac tgcattcaac taatggatag aaatttgaat aaaatatttc   900

927

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agaagaggtt tttcttgtgt gtgtgtgttt ttaaaaagaa ttttgtaatg cacttcttcc    960
atgcatatct tatctactct tcagggaata cagaagcaga tttacaaatg aagagacagt   1020
gtcattctgc ttgagggtaa tggtgggtgt cataatactc tatgaccacg tacatccagt   1080
gggagcattt gctaaaactt ccaaaattga tgtaagttat tgttttatat aaataatttc   1140
aaacgagttt ctccatggaa accataggat tttatttat gataagagcc agcaaaccgg   1200
actctcacaa aactcagatt tatagtttgt gaaatggtgg actttcatct cctctgtccc   1260
tgtgctgttt ttcttgtggc ctgtattcag gtggaataga atgatcaaag gatgactata   1320
ttgtctagtg agtacctcct ggaaggcttc tactacgtat ttggcaatat aaatagataa   1380
ttagatataa ggaatttga gtcatatcct ttaattcctt tggccaaagg ccatttcaaa   1440
taaaatgttt atttcagaat gcatataaaa agtcagtagt gctgctgggc gtgctggctc   1500
atgcctgtag cccaagcact ttggcaggct gaagcaggag gatcacttga cccaggagt   1560
agaagaccag cctgggcngc atagtgagac ccccattct acaaaaaaaa aaaaaaaaaa   1620
ctcgaggggg ggcccgaa                                                 1638

<210> 1594
<211> 935
<212> DNA
<213> Homo sapiens

<400> 1594
gtggtggtgg ctgtaggacc tggtgaataa taaactgaaa accactgaat cgtacccctt    60
aaaaacacac aaagcaaatt gacaaattat tgggaggcaa cataagagaa tggggtgtga   120
actttggatc agtgcggcct ggatatcagc tgtgtggtgt tcaaatagat tgcataacct   180
cgttgagtct cagtcttccc atctgtgaag tagggatcat tcctacttcg tagggttggc   240
atgagactca gtgagatgaa gttggtgggt cacttggctg gggcaggtgt cacggagcgg   300
gacctgtgat tgttcagcca cctactctgt gcccagtgct gtgttggtga ccaggtatgt   360
atgaagtcag taagccacag tcctgagtta tggtgcagac cccacatgca cccagagtca   420
gcttggcaag accccttgac accacgtgcg tggagggtgc aggtcggaga gctcacctcc   480
atggattccg tagagctttg aggcgtatcc acaaagtgtc caggagaggt ggcgtcgcct   540
ccacttgata gaggagaaag cagagatgga ggcagccaga agcatggtgc agtggtgggg   600
tttggtcatt aatttgataa tcacatggaa tacaagctaa tgtttattga gtacttactg   660
cctgcccgct actgtaacta agtgctttac tcctgttatc tcatttaatt ctcaaagcag   720
ccctgtggca ctgaggtggc tggagatgga gggatgtgtg gctgccatgt gtttgccagg   780
aagcagcagg atgggagtga gggcacagac agacacacat gccaggactt gtttgcacga   840
agctgaggaa tgggtgccca tcattcatta tactcatctc tctgtttat gtatattcaa   900
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa                                935

<210> 1595
<211> 628
<212> DNA
<213> Homo sapiens

<400> 1595
ggcacgagcg ggaggctgag gcaggagaat cgcttaaacc tgggaggcgg aggttgcagt    60
gagctgatga gatcgtgtgc cattgcactc cagcctgggt gacagagcaa gactccatct   120
caaaaaaaga aagaaaaat tttatatatg taatttaact tgcaaatgac aagttttaa   180
tattttctta ttttttgcttg tgtttgttta tgcctttaat tccttgacca gaatgactat   240
agctaaatta actttggtag tgtattttca ttcatttact atctcgtcat ttccatgggt   300
caggagtctg ggcacacctt agctgggtcc tctgttgaga gtctcaaaaa ggctaaccag   360
aaggtatcag ccaaattgta tttatttcta gaggttggag tgctcttcca agttcatgga   420
gttgttggca gaattcagtt ccttgcaact gtgggactga ggtagccatt ttcttgaggg   480
ctaatggcca gaaattgctc tcagctcctt agaggctatt cacagttcct tgccacgtgg   540
ccttctcaca gaccctctca gagcacagca gcttttacat cttcaagatc atcagcagga   600
gatctgtctc ctgctgcttc tctcttac                                       628

<210> 1596
<211> 410
<212> DNA
<213> Homo sapiens

<400> 1596
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928

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gaattcggca cgagatgcct tggtatttct ccccttccct gttgtggtct ctgtttcagt      60
ggtcggactc agaagcaggt tctcgactat gttaaagaag gaggacataa gaaggtgcag     120
tttgaaaggt aagagaagct tcaatgctac ttccagtctg agaaggctca gactcgccag     180
gtaacagttt gttgctgcta aatatttctt tacccagact tcagacttga tgtcccttga     240
gttgtaaatg atagtctcag tcatcctcag caagtccagt gttagagagg aaggtttttag    300
agcccagggg cacaccctcg aggggggggcc cggtacccaa ttcgccctat agtgagtcgt    360
attacaattc actggccgtc gttttacaac gtcgtgactg ggaaaaccct              410
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<210> 1597
<211> 1409
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (478)
<223> n equals a,t,g, or c

<400> 1597
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gtcaggatat gagtcttcct atgtcattct ttattctttc acatttatca tcttttatga      60
tatgtacata tggcaaagat tattcccact ttacagatga aggagcattt acttgaaagg     120
atgcagaata aaaacagata taattcatat actaaaagac atttcataga caatggcaca     180
atgatttctc caaaccgccc tacattatat gatttcttat cttcattgtg ttgctgatta     240
aacagtttaa gtgatttatc cagttcctct taggaagtgg cagaatagaa agctatgatg     300
gttaatttta tgcgtcactt gactgagcca tggggtgccc aacatttagt caaacattat     360
tctgtgtgta tctgtgarga tccttctgga tgaaatcaac gtttgaattg ttagactgaa     420
taaagcagat ttctctcccc aatgtatata ggctcatcct atttgttaaa ggtctganat     480
gttgactctc tmtcttagtc cgttctatgt tgctgtagag agatatgtga gactgggtaa     540
tttataagga aaggtggttt atttggctca cagttctgca ggctgtgcaa gaggcatggc     600
acaagcatct gcttctggaa agggacgtca ggaggcttcc aatcatggca gcaggggaaa     660
gggagaaggg caaggtatgt cacatggcaa gagmggaaga aagagggaga gaagaagaag     720
gtgccaggct ctttttamcc atcagttatc atgggaactw atagagtgag gactcagcac     780
aaagtcatgc ataaaggatc tgacccgtga tccaaacagt ttccaccagg ccccacctcc     840
agtgctgggg atcaaaattc aacatgagat ttgaagagga caaatatcca aactatatca     900
ccctcccata agtaagaagg cccctgtgag tgcagtgtgt tttagtttaa gctactagga     960
agggtgaggc aggaggatta cttgttgagc ctagaggttc aagtcctgcc taggcagcac    1020
agcaagaccc cacctctaaa aaaatggagc ccctcctgtc atagtacacc agatatttcc    1080
tgtcttctaa cttgaactga aacatccata ttttaaaagt ctcaagttta caaatcttgg    1140
gactttttag cctccatatc acacaagcca atttcttata ataataataa tgatgataca    1200
atatatagga tatatattgt ttctgtttca ctaaagaacc ctcatacaga agccaagcag    1260
catcctctct aatgtcaaaa tcagtgcttt ttctgtgaca ttcatgctcc tctacgaatg    1320
aaaacctggc tcacatttta tgctaatact aaggagtaaa aaaacatcca ttacttattg    1380
tatacaataa aagcttcaca acaattgag                                     1409
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<210> 1598
<211> 1300
<212> DNA
<213> Homo sapiens

<400> 1598
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gcacagaagt ttgaaaagta accctgggaa gaaatgaatg aggaggaaag aaaatgtaca      60
aatgagaagg acccagtgga tttgccatac aaagtacctc tgagtaaaac cactaaatta     120
ctcttggggt tgtggggaat tkagatgcca ctggccattt ttgccttagt tgaccttttt     180
tgggtcagta gtttctcaaa catcaatgtg cctaaggatc accttgtgaa gtgtttaaga     240
ttcagagtcc tgagccaccc tgagagatct ggattaaaca gatcaaggaa tctgcatttt     300
taactagcac tgccagtgag tttgtggact acactgagaa aatggctcta caatgttaaa     360
agcacacata ttttttaaaa atgacaaatg ccatttcaaa cagacttaca acccatttat     420
ataggctttc cctgcaaagt acacagtttt gacttataat caagcctaca ggaatgtaac     480
tagcaaggga gcaaaggaga gcaggagatt agaagaagaa tcaataaatg gctcaaatat     540
gtgaaataac cttgttcatc caaaatacag gatggtggtg ttctaactgt catggtaggg     600
ttcaattgcc tcagttcaat tttaggaaaa ctggcaatca tttcttttgc aggggacaca     660
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929

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atttctgaag   aacccagtcc   tttaaaaaaa   aaaaagtgag   ctatcacccc   actattgaga    720
gagcagctac   tagctcagta   ttggtgtacc   cagatgggca   gcctagcagc   caaggaaaca    780
gaggtgggtc   tatgtactgt   cccatcctgt   caccctttat   cagtgagacc   ttgggcagag    840
cctggctcat   ttcctggcat   acgataggct   ttcctcatct   gcacaatgaa   tatgcatcca    900
catgttaaac   caccacttcg   caaattataa   ggttgaaatg   agataataaa   gttgtgtcct    960
tagcatacag   actggaccgt   tgagaagtgc   agggggaaaa   aatcagaaag   atctgatttt   1020
agatttttag   tcaaactaag   caagaggact   taacatttca   gcaactcagt   ttgcaccatg   1080
aatttctcca   ctcaatttat   gagaattact   attcccttga   agtgatttaa   ggaatcatta   1140
agatttggca   gtggaaggtg   ggactcattt   catataccat   tacccttaag   ccgagactac   1200
tataagaagt   tggtacatgg   ccaggcacgg   tgctcacgcc   tgtaatccca   gcactttggg   1260
aggccaaggt   gggtggatca   cttgagttca   ggagctcgag                             1300

<210> 1599
<211> 397
<212> DNA
<213> Homo sapiens

<400> 1599
ctcgtgccga   ttcggcagag   gagatatcat   ctcacaccag   ttagaatggc   gatcattaaa     60
aagtcaggaa   acaacaggtg   ctggagagga   tgtggagaaa   taggaactgc   aggttcactt    120
tcatwttagg   attattgagg   tataatgtac   atgcaacacg   tattactatg   tctaatgtac    180
atttcaatga   gttttaacaa   atttatattg   tcatgtaata   atcaccatga   tcaatttaca    240
gaacgtttcc   acttgctgta   gtttggatgt   ttgtccccca   aagtgcacgt   tgaaatttga    300
tccccaatgt   tggaggtggg   gcttaatggg   aggtgttggg   gttattggag   tggatccctc    360
aagaatgcct   tggtgccatc   ctcgaggggg   gggcccg                               397

<210> 1600
<211> 964
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (883)
<223> n equals a,t,g, or c

<400> 1600
ggctgaatga   gttggctcag   gattatcttg   tccatgttga   aaactgcatt   tgaacccagg     60
tctgtctgac   tccaaaaacc   aaatggtttc   ctcctcatca   tttcagaaac   tagcaaaatg    120
ctttttatgta   caccatttga   ttttagaatc   ctgtacattt   tctaaatgag   ggcagtgaga    180
ctcagaaaaa   tagtatgtcc   aaagtgacta   aggtagtaga   gagaagattc   aaaaccctat    240
cccaggcctt   ctgactccca   ttccaatgct   cttccagcta   catcacagat   cttttgagca    300
ccccctgaaa   tcgcacccaa   actgatgttc   acgtggcaga   tacctcacca   ccctctcctc    360
acctcacgcc   ttaaattctc   atcttcaggc   ccctctgtct   caggtgacac   tcatgctggt    420
aaaatgtcct   gtgttttctg   ccggaagtag   ccagcccaga   caggtgcagg   agaggtctgc    480
tctagaggga   tatattgcac   agccttgtcc   ctgcctcccc   tatttcaccg   ctgatttctg    540
atgggacccc   cagatgagta   tcatccccct   cctggccatt   tacaacctgc   aaagcaactt    600
gagttcctcc   agagggactg   gcagctctgt   caagaccata   tacgattttc   ccatgaaaag    660
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aaaatgtggt   atttttcctt   ttgtcttttc   tgcttttgtt   ttncgctttg   ctccaagctg    900
atgattctct   cagcttctgt   cttcatgatg   ccaacactac   caaatgaaaa   aaaaaaaact    960
cgag                                                                        964

<210> 1601
<211> 1004
<212> DNA
<213> Homo sapiens

<400> 1601
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930

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ggaattcggc acgaggcaaa ataggcaatg tctctttat catagaaact atgtcctgat      60
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caactatgcc acagcagtgc tgggtagcat acagccagta actccacaac agcaagcatg     180
tgtacctcat ttatgcaact atggtttgtc ctgggtttgg ctgatctagg ctgggcttgg     240
ctccaggcca tatgtttagt tcatgtctgt tccttgcatc tctcactctt ctgggaccaa     300
caggttaccc agggcatgtt accctcatgg ccatggaaga actaaagtag gtgagcccaa     360
ccactctatc acatttcaaa tctctgttca cttctaccca ctaatatcct gttggccaaa     420
acgaatcata tggccaagcc caaaatcatg tggtagggaa gtaaatacca tccacaattg     480
gagcggggag gccatcaaca cttgctgggc aataatccaa actgttatgc agaatgatgt     540
gataaaaggg atcagagaga agtgctgtga ggaatgggga tgagttcact gggatgatgt     600
cagagaggca ggcgagggcc agatcttgct gagctacgga aagaaatggc acatttgatt     660
tgtgatttca aataatccct ttcactgcta tgggaaaact ggattgtaag ttggcacgaa     720
gagcagatgc agggaagtcc cagcaggtcg gacactggtt ccagtgttcc taggtgggtg     780
gtgatagaaa ggtgttgcac tttgaatagt ggcagtggag atgaaggcaa gcgctagact     840
gagaaacaga agcaaatgga cagggtacca aagtggataa catgtggtcc ctgaccttaa     900
agagctaata acctacttga tgagaaaaag atgtacagac acagccatgg tttggagaga     960
tatgttttta aaataaggcc atacacaaaa aaaaaaaaaa aaaa                     1004


<210> 1602
<211> 1110
<212> DNA
<213> Homo sapiens

<400> 1602
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tggttaatgc cagagtgcta gaactagtga agcctactgg gagaaggtat gtttttctaa     180
agaaagaatt ttggccttta atgttacaac attcaaattt gcatctaaaa ctttcactct     240
gggcaggtta gaaagttaaa gatattggtc aaatgattgg gcaattcacc tgttttcatt     300
aatctgtgtt ttgatcccta tgatgtaaac aatattagtg gatggattcc aggattcttc     360
tgagagaggg atatcttttt gtttacagaa attatttgat gagagattaa cataaaaaat     420
gatgatttga atgcctggat ggctgtcccg aaagcaacca gagaaatgg ttgataagaa      480
aatcaagaga tgcacttaag tttgacttgt tttgtttttc tcctgggaag atgaatagtg     540
ttgaaggatt aaaaagatga tagaaaaaaa gaaatgagag aggcattatg aaagaaccca     600
agattggctg ctgtaggatg agaacaatca ctgggtacat gtaaataaga aatattatag     660
agcgtagata tttctaataa agagtttaat ctctcttct gttttgtgca atatatgtca      720
taaatctcat gcaaccctca tgtgattgat ttattttcag aggccaatgc tggtgaagaa     780
actgaacatt ttataactgg ttagacatgg tatggaacag agaaatccac actgaaaaag     840
ctgctcagag gagaagaaag agtaagttta atgatcatat gcagaatttg agggctgtca     900
ggctaccctt tgatgtgaca ttcagctggg atacgtgggt tattaaagtt aacttgattg     960
taacaataac tgataaaagc tgctgtatcc tcattcatag gtagattatg tttataaaga    1020
acagtacctg atactactag atcagtttaa acatagtttt gctattgtta agagaccaaa    1080
gaattgctac attttgattg gttgaatgca                                     1110


<210> 1603
<211> 639
<212> DNA
<213> Homo sapiens

<400> 1603
attcggcacg ggrttttwat atttcctgat ctttgaacca ataaacacag aatacctact      60
gtgtgtcaag tactatgcta ggtgttgaaa caaagataaa gtactatgga aactattaac     120
acacacacac acgcacatgc acacatgcac aaacctatat tcttttttct taccaaaacc     180
ccaaatcatg ctcctaattt tgaatgtgca ggtgcggttt ttgggtgatt gggttctttc     240
tttgctatgt gggaggactc cggtagagta gggtggttgt cagacagaag cagatgctct     300
tatcagccgg gcattctcac cccaggtaga agtgctgtct gtggtcgctc agcagatcct     360
cagcatccaa caagccatca ttcggaagct aaagacattc atctttgaag ggactgagct     420
ctctctgaac ccaacgcgcg ctgtgttcat caccatgaac cccgggtatg ctggcagggc     480
tgaactgccc gacaatctca aggtaaatgc cagcagatat acatgtgggg tgtgcttttt     540
agaatagaaa cctctgggcc gggtgtggcg gctcacacct ataatcccag cactttggga     600
ggccaaggtg ggcaaatcac ctgaggtcag gagctcgag                           639
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931

<210> 1604
<211> 1197
<212> DNA
<213> Homo sapiens

<400> 1604
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tcaacaaaca tcctacttgt atggtcttag gatctgtttc cagacagtca cctcggggct   120
cactctagtc ctgaaagcat cttcccatcc ctttgtgatg ttcagtctgt tgcgggcatt   180
cccctctgac aggtgtcctt gccctgctgc ttctacaggg tggcaaagag caagggcttc   240
agctcccaag ctcagctgca gggcacttag gccccgagtg tgtccccagt gaccctgact   300
tgagggacac actgggcgct gcagccacaa ggcactgctc ctgtagtcat ggtgggcagc   360
cagcattgcc ccaggccaca gtgctggtgt cccaggctcc tcagggacct gaggacaggg   420
ccaagtgtgc cagtccacac caggctggcc ctgccagtcc acaccaggct ggccctgcca   480
gtcaacaggt gcacatacag gtcctgaaac cacctcaggt caaataaggg atttgggggc   540
acacaggttg cattctgcct cttgggaaga tgatgcaagg gaatgacagg caggctggtt   600
ccaacgcatt gccaagcgcc agctgagcgg gctgggagca ggcacattcc ggtaaccagg   660
acagaagtgg gctagtgata cctggtcatg tcttttccca agacaaaacc aggaagactg   720
gcccagcccg tttggtgtgt tacaggctga actgtgcccc tccccaaatg tgtatggtga   780
aggcctaacc tccagtacct ccaaatgtga cctcacttgg agaggggtg tttagagagg   840
taatcaggtt aaaatgaagt cattagggtg ggtcataacc ccatacaact gctgccctga   900
tatgaagggg aaatctggag acagctgtgt agaaaacacc atctgaacag gaagacagcc   960
atctacaggt caaggggaga ggtccgggac cgatcctccc tcccagccca aagcaggaac 1020
tgaacctgac acctggattg tagacttctg gcctccagga cagagacaat atgtgctgct 1080
gttgaagctg cccaggcagg gttcctctgt gaggcagccc caggggactc agagtgtgcc 1140
ccaggagtcc tgtgggaatt gccccaccct tcctggcaca ctcctgaatg ttctcga   1197

<210> 1605
<211> 421
<212> DNA
<213> Homo sapiens

<400> 1605
ggcacgtagg aactcctgac ctcaggtaat ccgccgcct cagcctccca aagtgctggg   60
attacaggtg tgagccacca tgcccagcct aatctttatt atttccttct ttctgctagc   120
tgtggattta gtttgtcctt ctttttcttg ttccttaagg tgtgcaggta acttgtttct   180
ttgagatctt tcttatttta atgtaagcat ttccagctgt aagttccttc ttagcactgc   240
ttttatagca gcccatattg tgtttttgtt tttattggcc atgttgtgtt tttgtttgt   300
tttgtttgt tttttaagac ggagtctcgc tctttcaccc aggccggact gcagtggcgc   360
tatctcggct cactgcaagc tccgccaccc gggttcacac cattctcttg cctcagcctc   420
t   421

<210> 1606
<211> 1112
<212> DNA
<213> Homo sapiens

<400> 1606
ggcacgaggc tccacccggg ctgttttat gacagctggc aaaacacgct aaggcacatt   60
gaggactcag tgaggcaggt tcctgggcct ctgttaggct aagtttgaag ttgttccatc   120
actgcctccc tctgccttct ttgccatttc catccatgat agcactaccc taactagtga   180
tgagaagcag tctttggagt tcctcttctc tcctgtccct catggctaat ttccctgctc   240
agacttctgc ctctggtctc tttccttctg tgcacactga cttttttccc tctcctgtgc   300
cgagctggag ggtaggaccc tctgctgcag cactgggtca ttctcaggat aaagtcttgg   360
tctatctggg cgaacagatc acttccagct cgattcatac atagtgactc ttgcttgaat   420
agcaagattt gcccaaatca gagctttaat cctatatata tggaacaaat aatcacttcc   480
agatctccag ggaatctgct cacccttcat aagtttacta gacagtttca gaattttgga   540
attgaatgta agaattatga agggagctgc ccttcaacac gtgggatga tagattaaag   600
gattatgaac ttagccagtg gaaggtgaag aagggtgtag tatagcggtt ggggtcacag   660
ggctgcttct agatgccagg tggcagcccg tttcttgccc caggtggtag ggtagttgtg   720

932

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catctctgtt ttgtgtactt ttcaatgttt gttacctcac aatagaagag gtttaaaaga      780
ctattttgtg agagatcaag ttttaagtgc tttttgcccc catcattggc ttggctaggt      840
tagaacaaag tgtgataatt gtatttcctt tttttctttt ctttccttcc cttctttctc      900
tccctctctc tcgttctccc tacctcgctc tttctttta taggaatgga aaacaaactc      960
tattcctata agcttctcta tttctccttt ttttccaaaa tggaaaaaaa atagcaccag     1020
ccacaagagg cctttgtggt gatgacatgc tgtaatgaat gttaagttaa ccacattacc     1080
tgacacacag gctcagtaca ggccgtccca tt                                   1112

<210> 1607
<211> 418
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (80)
<223> n equals a,t,g, or c

<400> 1607
tcggcacgag gttttatttc atgtattctt tgtctatgtg tatatgtgtg ttttatatga       60
tttatattta tttatatttn atgtttactt acaaagttgg aagccagacc tggaaggact      120
tcccctacca tactaaggaa atttaattta attttgagta taaaggagag gtgctaaagg      180
attttgatca atgaagtgat agttctagta cccttacgga aagtggatta gaggaggcta      240
agaatgaaag cagggaagct ggatgtggtg gctcatgccc gtaatctcag cagctcggga      300
ggcggaggtg ggaggactgc ttgagttcag gagtttgagg ccagtctggg caacatagcg      360
agacctcatc tctaaaaaaa agaaagaaag aaagaaaaaa aaaaaaaaaa aamtcgag        418

<210> 1608
<211> 759
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (740)
<223> n equals a,t,g, or c

<400> 1608
ggaattcggc acgagtgtgt gccctrcatt ccaaggaatg ggccaagggt ttagatgacc       60
ctcatagata aggaatgagg ctccaggctg gccactcctg gatttcttag cttggaactc      120
caaaaccagc actcttctta gaccacaggg ccagtctcag ggtatgttta agttattgct      180
gtcaggtgca tctgccatac actgtgtgtt tgtgtgtgtg tggtgcagtg tggtgcatgt      240
gcgtgtgtgt gtgtgtgatg tgctggagtt gctgtgtgtg ctgagtggga gagctcaact      300
tcattccttg ggtgacaagg gagaagatac tgatgggagg aggcgaatca caggtttgca      360
tttctgaaaa tttagtctgg agaaagacgg acaggctatg gggacatgga gcaaagctac      420
ttcagtggtc caacaaagag atgatgaggg tcagagtcag ggacgcagct gggggaaaaa      480
cgtgaaaaat actttgtaga taaaatggtc aggaccagat ccttgccttt aactattcag      540
tgcctgaata tatccttgat gacacagtag actgagaaag gaacaatctg cacaagaatg      600
agaaccttgg tsgggggttg tggcttacgc ctgtaatcca gcamtttgga agccgargca      660
rgtggatcac aaggtcagaa aatcaagacc atccttgcca atatsgtgaa accgtgtctc      720
tactaaaaat acaataattn gcctggtgtg gtggtgggc                            759

<210> 1609
<211> 1440
<212> DNA
<213> Homo sapiens

<400> 1609
ctacgtgccg tttagatgct gggccatatc actgagtgac tatagttgat tctcaaaaca       60
tccatgtgcc aaatgattaa tgaagtatta atatttatca aatctactga tttatcaata      120
acttgattta aggaatatgc atctggaata tatcatatat gaatatgtac tttttactc       180
```

                                   933

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agcagtaact tactattctt tttctattta ctgctccttc ctactgggtc tctctctctt    240
gctctcgctc tctctcgctc tctgtctctc tcttcttgag gtattttccc tcctctttct    300
attcaaagct ttattttcag tctttgcttt cttacagtgt tgagttgttt ctctgtattc    360
ctgtgtgcag attttgttat ttttatataa tttattcctt tattctttga agctgatcta    420
cccctgtctg gctccctttt attgtgacta gactctgggc agctttttat tgacacagaa    480
accatttttt tttccacaca cccactccca ctccatatca ttcgtacctt ttgaaggagg    540
aatacacgtc tgaaatagta cttctcacac agcacagcct ggttcttgtc ttgagccaag    600
tctgtaactt ggcttaagca gtttcctcat tagataaacc ctggctctta aatgaaaaac    660
aagcaacttc attcaatccc caaaacagcc tgccgcagca cgaagagcag ccacacccca    720
gtggtgccag ctttcttctc tttttttttcc atgtctgccc tcttactagc ttgcaccagt    780
tctgctgctg catgatgttg tctgtggagt gattttttta aaagtatca gctgcttctt    840
tccatcctcc ttcatcatgt atttcctttta ggagactttg ttcctctaat ccgttccaaa    900
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agggaatgga ggaaatggtc tcctcttaac acgttccatt ccagaagtcc aggccctttc   1020
aggaaagcca cgcgttactg gcatgcatga aacatttggg cgacaaccta aattagagca   1080
gtgcatcctc ctgccatatc cccttccca gctgaggaga ggaggcagtt tctgaagaac   1140
aaggaaggag agcatagatt ttcctaggct ttgaggaaga agacctgcat cctgtttggc   1200
tggactaatt gtagggaggc ttgtgggatc taaggagaga aggaatggct gtctcccttg   1260
ctgagaaggg tcacagggag gcagccagaa cccagtgggc agcaacgact tcatagtgtg   1320
gctgaacagc gagggctcca gacagctctt ccagaggcct tggtgtcccc aaggccctga   1380
tacagtagag agagccactg aaccaagggg gcccatgcag acaggcacat agggagcccc   1440
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<210> 1610
<211> 961
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (549)
<223> n equals a,t,g, or c

<400> 1610
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gtcaatggct gtccatgtcg cccgtgcttc acctgaggag gctggcgagg tgtatcctct     60
ttcacctgcc tcagttttcc tcatctgtga aacggcctca tggctttgga gcaaacagaa    120
tgacagataa aagggacaaa tgacacaggg ctctccattt gtttaacgag tacttattga    180
gaacctactg tgtgcagggc accaagccag gctgtggaga aaacagaagc gggtgacagg    240
atgggagagg ttccagaagc cgctaggagg agaaggcagt taagctgtga cctggggcag    300
gtggatgggc ctccctggga agatctgggt gtgggaagcg cctgccaggc aggggcacc    360
tcaagtgcaa aggccctgar gtgtggacag gcgagacaag accaggacaa gccccgctgt    420
tkccgttgtc tggaaaccaa ggtacaaaga gaggagggga cggagccaag gccacgcagc    480
tggcagagkt ggagctggga tgttagggga ggaacagagg tcacgacctc tgcaagcttc    540
atccccanc cctcacccct cacccccagc cagaatcttc cagaggggtg gcctcccctt    600
cctgagccac cccagctgtt gcggaggctg ctgctgtcct ggttcccttg tttaattaca    660
aacaacattt ttcgccctca cttaattatg caacagacgc ccgtggatct gccaccatct    720
ggccccactt tctggcttga gacgacgagt cgcagtgact tcgagggctg agagggggagc    780
aagcgggagg cacctcggcc aggagggcac cgagcttggc atggcctcag ctctgtgatg    840
tacctggcca catctctgag tcctcatctg cagaattggg acaattgagg gtggcgcaag    900
ggtctgtgag acaagagctg cttggcaaag aggagccctc agccctaaag ggggcctcga    960
g                                                                    961
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<210> 1611
<211> 1174
<212> DNA
<213> Homo sapiens

<400> 1611
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cgagaaggat tgttttttgt tgacttagca aaaacttctc cttacaaaac ctcttgagtg     60
tgctgaattg tgaacaggaa attgacttgg ggtaagggga gagagggaac caggcactc    120
ttaaagagaa aaagacccct gggtcgataa ccaagtggtc ctgggactgg atctggctat    180
tacatgcaca tcaacaatct tatgtacttg ctgattaaca aattatatat attctgcatg    240
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934

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tttacacaaa cagttcttgt gctagagagt ccacatcatt taaactttgt gggagaattt     300
tgcaaatgat ccaatcctag aggcttgtac tctttcttga gccccactca cctttccttt     360
gtacctcaaa cctcagtctg actcttccag aaatataggg gatggttccc ttctcttctc     420
ccattcccta cataaccctg agtttaaata caaacactca gtttaattgt ttcataaggc     480
ttatttttgg ataaagatat ttcattttcc ctgcacatta aactttatc acacttactg      540
ataaaatgcc acagctcttg tattatcaac tacaagttca gtcttctact cagataccaa     600
ttaatttctg tttctttgag tatcatggac tgaattttgt cccccactca ttcatgtgtt     660
gaagacctaa cccacaatgt gtttatattt gacatagggc ctttaaggaa gtaattaatg     720
ttaaataagg ccataagggt ggagccctaa tccaacagga ttagcattct tgtaagaaga     780
ggaaggggca ccagagtttt caagcacaca agaaaggcca tgtgaggagc cacataacca     840
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taggcagatc gcttgaggta aggagttcaa gaccagcttg ggcaacatag cgagacccat     960
ctctagaaaa aatacaaaaa ttagcagggt atggtggcag gcacctatag tcctagctgt    1020
tgtaggggct gtggtgggag gatcgcttga acctgggagg cagaggttgt cagtgggctg    1080
gaatcaggcc atcgcactcc agcctgggtg acagagagag accctgtctt aaaaaaaaaa    1140
aaaaaaaaaa aaaaaaaaaa aaaaaaaact cgta                                1174


<210> 1612
<211> 1939
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1874)
<223> n equals a,t,g, or c

<400> 1612
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ctattgagta cttgaaatgt agctagttag aactgcaatg tgctgtaagc ctaaaataca     120
cacatttagt acaaaaaaga ttataaaata tcccaacttt tatattgatt ttgaaataat     180
attttgagta tattgggcta aacaaaatgt agcattaaaa ttaatctcac ttctttcaat     240
gtggctgaca aaaaagttta aattaaatgt gcggctcaca ttttgtttct attggacagc     300
acaggtggag aaggtctctg aacataaaac accgawtaag tatattttcc actgggactg     360
ggggtggggtg ctttgggggga agtgcatagg tgctgggcag tgttaaaatc agggtgggcg    420
taggtggcag tgaagggcag tctttgtgca gccagatggc aagtgagagc atgaatgcct     480
gactgttgga aatgacaaaa taaatcatgg aatcctgaag tttcagggtg taaaatgctt     540
tagaaatcat catctgaccc aataaatgat ggaaagaaat gccctggact cggaatctga     600
atgttttggt tccagtctca gctccatcat ttattagata ggacgtcttg ggcaagtcag     660
tctcttttct tatatgtcta atgggggaca taaaatctgc ttgatctttc ctggaaggtt     720
atttctatta ttttaactta tttgaaagcc cactcaaaat tccaaagtac tgcaacaata     780
tgagatatta aatagatgtt gcctatttta caatcctggc tcagcccagt tctacagaca     840
gttggtaatt ttcaaggtga gtaattaata cagagatact ttggcagtga aaatattatt     900
agtgtgtttg tgcttatgtc tacacagaga agagagagga ggcaaagata aaacctgtag     960
ctcccatttt cttcttatat atttttactt attttttctg tcacagttat aacccttaa     1020
gaaaaattta gatgagtact agaatctggc aaaattagtt aaatcagact gagatgaata    1080
agatagaaca aaatgagctg tagaatgatg ttttggctga gccactcact ctgccagggt    1140
cagcaccttc tttaattgac tcttttcaag gaaatgcagt acaggttgct ctctgttgtt    1200
acctgtgtgt catgacccgc tgggccatta acccatttgt cttgaatagt caattctctg    1260
gccccaggat tgtcaggagc caggaggagc tggggaacat ggctgagaca ttctcactcc    1320
tgttccagcc tcaggaaaac ccactgagcc tgggtcaaat cttgggagta actgctgaca    1380
atggtgattc ctgagccatc ctctctccat tgcttgtcct gggtgaggcc tcagggaggc    1440
caacaatttc ctatgcctct ctattgctgt acacatctgg aactgaaatt cattgcatat    1500
cccttcaccc ctgaatttaa ccctgagaag tgtgaaaaat tggttcaaac gtcctcatca    1560
aaactcatgt tgaaatttaa ttatcatatg taatggtatt ggaagatgga aactttaata    1620
gatgataggg gccagggtgc agtgctcacg cctgtaatcc caggactttg ggaggctgag    1680
gcaagaggat cacttgagca caggagtttg agatcagcct gggcaacatg gtaagatcct    1740
gtctctaaaa aaaaaacaca tacaaattag tggggagtgg tggcacacac ctgtagtccc    1800
agctattcta gagtcgaggt aagaggttca cctgagccta gagaggttga ggctgcaatg    1860
agctgtaatt gcanccactg cgctccagcg tggacaacag agggagaccc tgtctcaaaa    1920
aaaaaaaaaa aaactcgag                                                1939
```

935

<210> 1613
<211> 731
<212> DNA
<213> Homo sapiens

<400> 1613
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ggcacgagac ctgggggttgt cggtgctgct ccaggatgtc agatgctccc ctggggggtgt      60
gggtgctgct ccaggctgtc agatgctcgc ctgggtgtgt gggcactgct cctgactctc     120
cgatgctcac ctgtggttgt gggtgctgct ccagaccatc agatgctcac ctgggtgtgt     180
gggtgctgct ccaggttgtc aggtgctcac catgggctat gggtgctgct acctgttgtc     240
agatgctcac ctcggggtgt gggcactgct ccgggctgtc agatgctcgc ctgtggctgt     300
gggcgctgct ctagactcta cgatgctcac ctgtggttgt gggtgctgct ccagacaatc     360
agatgctcac ttgggggttgt gggtgctgct ccaggtcatc ggatgctcgc ctgggagtgt     420
ggttgctgct ccaggctgtc ggatgctcac ctggggggtgc agggtgctgt tccaggctgt     480
cagatgctcc cctgggggtg tgggtgctgc tccgggctgt cagattctca cctgtgcgtg     540
tgggtgctgc tgcgggctgt cagatgctca cctgggggttg tgggtgctgt taaaggctgt     600
cagatgctcg cctgggggttg tgggtgctgc tccgttcggt cagatgctcg cctgggggggcg     660
tgtgtgctgc tccatgggtt cagatgctcg cctggaggta tgggtcctgc tccgggaggt     720
cagatgctca c                                                          731
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<210> 1614
<211> 1374
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (642)
<223> n equals a,t,g, or c

<400> 1614
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ggcacgagag atgttggtcc cacgtgactc cctttgtgca aaagcagatc ttccctgaca      60
gggatctgca agtgtgcaga gatcacagtg ctgtccacag tggtgccctc aggggggaggc     120
aggaaacgct tccacttttt actttttgta actaggtttg ctagaaagcg tatatttata     180
tttgtctttg gaaaataatg attagaaata gaaggcataa aagtaataaa tattcattaa     240
agaagatgag gcatgaggca tgaggcgtga tcccttctac ccataggcgc cagtgttgca     300
catcgtggtg ttctttctgg gatgtttctc gtaagcactt attaagttga cttgaaactg     360
cagcacgcat gttctcgcat gccactctcc cttgcagagc agcccgtggc gcctcctctt     420
caggggccat ctgccagttc tttcgggtgg ttctgtgccc gcatcagctc ctggcagcca     480
cccgtgtcca gcccacgagg gagcccaccc ttggacatat ctaagctccc cgaccacctc     540
cttggccttt aatgggagtg ggatcagaga cagaggggcg acaagacaga gggcccccggg     600
gggtctcatg gggggggcggg gcaagagcag gcattgctga anttgggtca cctgccctct     660
gtcaggagca acgggggcct gaatcccagt ccagcctcag cctcactgtg gtctcacctt     720
tctccccagt ttgtaaagct gtgaattagg gacaggaacc ctgaacaatt ttgagagtca     780
catgagcatt tggaagtggg ctttgtaggg gaaagtgagg aggcccagga ggctggtttt     840
tgctgtggtc acgtgtgggc ctgggagagc ccagccctgc tctggcccgc ccccgtctcg     900
ccatctgtgg aacttttggt ttcaagcagc tgcaagagtt gccaaaaggt tgaaagaatt     960
cagctgcctg actccaggtc ctggcatccc caggagaggc ccctctttcc caggggctct    1020
ggtcaaagtt ccagagcctg gcatccccag gagaagagct cctctttccc agagctctgc    1080
tcaaagtccc agggagcccc ctggtcctgc atgggctggg gcaaccatgc tcccgagtct    1140
tgtggctggg gttcagtgct ctgaccaggg gacaccaggg cagggtggac ctctaaaccc    1200
tgtgcactga gggaggagtg aggggtcccc agagcactgc tggggcagct gggagcagcc    1260
agggaggagc ctgggagaca ttccggcggc tttgttgtct gagtgaggga ggaaagggga    1320
gtaaagggtt gagtcagggc ctgcctgggg cttttcctgc caccaaactg aacc          1374
```

<210> 1615
<211> 1000
<212> DNA
<213> Homo sapiens

<400> 1615

```
ggcacgagtg ttcaagacat ttttttttctt ttctttaatt ttcagaagtt tgactatgat      60
gtgtgttggt aaggatttct tttggtttct cctatttggg tttgctcaga ttcttgagtc     120
tgtaggttta catcttttgc caaatttgaa aagttttctg tcattattcc tttgagtata     180
ttttcagtcc caccctcttt tgtaactctt tctggaactc caatgacaag cgcattagat     240
cttttgttat ggttccacag atccctgagc atcaattcat tttttctcat tagacttaaa     300
tagactttca agggactcaa aacagagtct actttctctc ttttgtttag actgggcaga     360
ataatggcct ccgaaagatg tccacatcct aatctctgga acctgtgaat atgttacctt     420
atacagcaaa aggacttggt tgacatgatt acattaagaa ccttgtgatg aggagattat     480
tctggattat aatgggccca atgtaatcac aagggtcctt agaaatggaa gagagttaga     540
aggagatatg actatggagg aggttggagt aatgtgatgt gagaaggatt cgatcctctg     600
ttgctggctt tgaggatgat agaaggggac tacaagccaa ggaatgtggg ctgcctccag     660
aagctaaaaa aacaatgaaa aggattcttt cctggtgtct ccagaaaaga atacagccct     720
tccaacacct tgattttagc acttctgacc tacagaactg taagataaaa aatgtgtaat     780
actttaagct tctaaatttg aggtaatttg ttgtgagaac aataagaaac aaacacagga     840
atccctattg tctgtcttca agttcactga ttctttttctt ttctttttttt ttttttgaggt     900
ggagtctcac tctgttgccc cagctggagt gcagtggtgc gatctcagct cactgcaaac     960
tctgcctccc gggttcatgc cattctcctg cctcagcctc                          1000
```

<210> 1616
<211> 1122
<212> DNA
<213> Homo sapiens

<400> 1616

```
ggcacgagtg aaagcctaga ggtaatgaca tgctcggcga gctcaaactc ctggaaactc      60
tcccaggaaa actcgggatg cgaagatgta ctctagaagg gaacagatgg cttctgtttt     120
tgtgtgtggt atggaatgga tggcaaaagg tcagtgagct ctgtgggaga cagcacggtg     180
ccaaggggac cgtgtcacct tcctcacctc tgcctctgtc tcagacacct gctgacatat     240
gaccaggtgc agatggagca gtgccagcca cgccctggga tgaggagatc aagctggtgc     300
tcagccccag caaggcgggg tcagtgacat ccctatatgt gaatggggac acatttgtaa     360
gcagagacat gaagtgacag aatgagatca cccacagcga catctgccac tacccaggtg     420
actgggccaa aagtgggctg tggaattgga acaaaataca acagattgta tttagatatt     480
gactccattc taatatatag actttgcaag gtaaacattt caaaattgct ctttactatg     540
agaaccaaat gttttctcca gatattttga tataaatttt tgatgaaata aatgcatcct     600
aggaaaggcc ttgctcccat attaggaaag taaattctat atccaaggac actgggtaac     660
tacagccttg aatgttcatg ggctacaata acgacgatta tgagggaacc agatctctct     720
cctttactgt gtttgggtag atcctttcat cagtatgtca aggctactga aatgttagtg     780
taatcttgat gtcagacagg ggacagggtc tttgcttgga agcctcccaa atccagggcc     840
tgtggaaagc caaagcattc cctctgagat ttcggcgaaa tctttttgtct cctaattccc     900
ctttctttttt tcttttttcta gttttttttgtt tttttttttt ttaggcggag tttcgctctt     960
gttgcccagg ctggagtgca atggctcaat ctcggctcac cacaacctcc gcctcccagg    1020
ttcaaatgat tctcctgcct cagcctccca ggtagctggg attgcaggca tgcaccacca    1080
tgcccggcaa caagagcgaa atccgcctaa aaaaaaaaaa aa                       1122
```

<210> 1617
<211> 996
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (190)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (985)
<223> n equals a,t,g, or c

<400> 1617

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ttcctttgcc ctggaaaagt ttcaccacct ttatattttt accccagcct tggagttatc      60
tttttctgct ctccattctc catgtccaaa aacttgctgt cagtccagtt tttaatcagt     120
tttctccttg aggcttgatc tcccatttct ctcatcccat tatagctttt catgtagatc     180
tgaggcccan gttactgtaa ttcttttttt tccaatttcc ttgctcccag gatccccatc     240
ttgtataaag tttctaaggt gctcctcctc aaactccatt tttacaatat ccgtattgta     300
aaattttcat tttcagtaac acccagtaga taattttttca aagacgatcc tcctcaaaca     360
cccattttta caatatctct attgtaaaat ttcattttca ctaagtaaca cccagtagat     420
aattcctatg gagcagtggt gttccaaatt ctccattacc tctatgccta atattcatca     480
gccttcatta ctctctagca tattcacctt gattcaacag attcaaactt cctacagcct     540
tctactgatg tcttataagc tcttgcctct gtgcctttct catgctattc tttttgctta     600
gattgctctt tggtcccagc tcatgttcat cactcccttc aaagcctttc ttcctttata     660
tcttctgact gagctctccc tgattgacat cacctcatgc gatgacctcc ctcattctgt     720
gctgcctcag cacttatctt ttgagtttgt actgtggtcc atgtacttac taatatgttg     780
ctttgtaatt attttctagc actctgtgtt acagtttcat atttgtattt atttccaaaa     840
ttaaattgta agctccttga gggcaggaat aataactttt acatttgtat ctctgcaccc     900
ccgagtgcct agtatagtgc tgagcacata gtaggcgttt aataaatgct tgttgaagta     960
aaaaaaaaaa aaaaaaaaaa cgggncgggg gggggg                                996


<210> 1618
<211> 2111
<212> DNA
<213> Homo sapiens

<400> 1618
gaattcggca cgaggstttc catctctgag ttggccttca acgttcaaga aaatggatat      60
attatttttt ttccttttct atttccttca ggaaagacta ggtttcagta cggtttcaaa     120
taaaagcagt ggagtaattt tctttcccgt agttctccct cagcccctg aatcataaga     180
atcaaccctc attccttttc tcccaacctc tcaggtgcat ttgctgagtc actgcatgtt     240
ggcctgaaac agggtccatg tgtctcccca ccatttccaa ggcatggagg tgggaagtgg     300
gaagtgggga gggtgagctt tggactgaac acccaaggsc cacggccacc agctacgagg     360
cttcccacag gcttgtcttt ctctgwatgt ctgtcacagg attccagttc tccagtcaaa     420
tcaatgatgc ttctttggcc ctgtgctccc tgaagtcctc cctttatatc ataagtaacc     480
aaggagtcct tcatgcctga tttttgaatg ctagtaaatt ttcaacatcc tcatccaact     540
ctattcccca ggcttccctg ctccaaactc caaatcacct gaaaaatatg ttccagtcac     600
cccacctctg caccaacttg agtgagtctg aactgagaag catttattcc aatttgtcat     660
atttgtggag gatttttctt aaatggtcac aatatttcta gttccatggg ctcttccaag     720
gctttgtcac ttcccatcca gargcagttt ctgtgttctt ccccttgaac gtgggargca     780
tttgtgacgg ctgccttgam caacagggtg gaagagacac tgcatgamct ctgagtgagt     840
aaaggccagg cagcccttgc ttgactctct tccttgagat gtcatcctta gaacctccat     900
gttgtgagaa agctcaggcc actgggaaga acacgtgggt gttcccattg ttgacagcct     960
acagacaata tcaaacacca gacatgtgaa tgaatgagcc tccaggtagg tccagccatt    1020
gagccagccc tcagtcaact gtaccagctg tgacccccaga catattgggg tagagacaat    1080
tatwatatct ctactctgcc ttgttcctgt tgctgaccca caatcttgtg agtctactgc    1140
tgggtcatga aaaaaaacaa attgaacttt cattcatwca ttcattcatt cattcatcta    1200
tccacctact catccatcca ccaaagacac acttactgat atcccactgt gtatcataga    1260
ctataagcat gggggctgca gagataaaga aagaagtgaa ggtcctgagg agctcacaga    1320
catactactc attctgctgt tgacccatca ccccaagtaa caaaagagca cccctcctaa    1380
tatcctgctt cagattttca cagtcgctca tttatgcttg catttctgct ttgccattcc    1440
aactaagtgc ctttagaata agggatcaac ttttttttctc atggtgctta gcacggtttt    1500
ataaatttaa cacatgtttg atatagcttg ttaatttttg aaaaatcagt ccatatactg    1560
ctagaggttt tcaaggcttc aagtaaataa aagaattaca ttttggaaaa ataacttaat    1620
aaatgaaatc cttgtgccaa aaggagaaaa agaagaaagg tatgaatgat ttttgggtcc    1680
ttattagatg actggggcct gctatttcat ttactcttca tagcaaactt atacaaatta    1740
tgacaatcct caaattgcag actttaagat aaactggcta aattgaatga ctatcaaatg    1800
tggcacaagg agattagcca atgccaggga ctctttttgca gccactgtgg tgactccagc    1860
acatgaagat gccacccaga tgacatttgc tttcaagacc tttgaacagg ctgccttgaa    1920
aagaatgctt tccaatgtgc aactctatat cttctgtggc tctggtaagt gaggactta    1980
cagcttatgt tcactctttc ctgtaatcat ttccaggcct cgtggaaaag tgttaccaat    2040
taatactccc attatagaac tggaacaaaa caaagtgcag gacgtgggac aaatcagtta    2100
aatatcctcg a                                                         2111
```

938

<210> 1619
<211> 473
<212> DNA
<213> Homo sapiens

<400> 1619
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gaattcggca cgrgcaatcc acccatcttg gcctcccaaa tttctgggat tacaggtgtg     60
agccaccatg cccagcacat ttctttttat aattacccaa tctgtggtat tctgttacag    120
caacagaaaa tgaaccaagw sgtatgttct ctttggtatc tgctgctttt attcaacatt    180
aggtttataa aattcatcaa cattgatgtg catagcaata gttcattcac tctcattgcc    240
ttatgggacc ccgctgtatg agccatctat ctattgtatc tatggctgtg gracaaacta    300
ccccaaaacc tagtgactta aaacaakaac atttatcttg catagtttct atgcattagg    360
aatttcaaga gcagcctagc tgggcagttc tggctcaggg cctctcatgt ggttgcagct    420
gagatgtcct tcagggctgc agacatctga ctggggcttg accgttgctc gag           473
```

<210> 1620
<211> 1478
<212> DNA
<213> Homo sapiens

<400> 1620
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ggcacgagtt acactagata aacctgtatt ttaaaagtat tcaaacaaaa cacaacacac     60
ttacttagag caataataat aaatattaca gaataatata atccttcccg ttctaaaata    120
tttttaaaga atatgataac tttatattgg gtcctagata ccatactgta tttagggaat    180
ttaccaagat agagctggct ttattgtaag tcaagcaaaa tgaactggcg ttcttgtaag    240
ctgggttcag tctactatta tcggttctgt acagtgtctc ctcgtgtgct agtgaaacag    300
gatggggggc gaggaacctc cttcccatct tttactagcc tgagaagtat cttttcaata    360
ttttataatt ttgcctttgg caaagggctg cttatctcct gggaattcag gcacattttg    420
aagatttccc catagccaat gagcacagaa tgattattct cacaaaagtt cttaagaaat    480
gtcacctctc ttgtgtctcc ttctttctag ataagctctc cccacacctt tctcctgaga    540
cagtctagaa tctccctttt atattgctgc agaaacacag actcatttcc atacacgttt    600
actccggcac ctatagcata gatcaatgct atggacacgt gctgttgtgt gagatttaaa    660
agtaaatttt ccattcagag atttttaaaa aaaaaaatct ggtcatagca gccattagtc    720
aacttagtct tcattgccct ccttttttat tctaagcatg attcattcag gatataagat    780
tgcatgggca atcattctag tattaaacac cttggaaaga tgaggaccat cttcttcctc    840
cctgtgtctg cttctctttc tgttccatct tctttccttc cccatttctt tcactctttc    900
cttccctgtc caggtcctgt tgaatgctga ctcaggccat ctgtgctttc caggccagct    960
ctttcactta ttgctcatga ttttggccaa gccatttaaa atgcctaggc ctcaatttcc   1020
tcatgggtaa aggaagctaa taaggtctac ctaatggacc cacccaataa aattcttttg   1080
agaattaagt gggaaaatgt atattaaaca cattggaaat tcttgtctac aggggatatg   1140
tcatcaatgg gagttgttac tgctgctgtt tctactagat tccaaattga gaagaaaatc   1200
tttctaaagc aagtatcaag tagagtcagg aggaagcatc taaagtttct gcaaggacca   1260
tggcacatct tcttgaacac tgctgggatg attatttgga taataggagt tggcaccatt   1320
ttcattattt tataggcaat atagaaatat atctgcactc ttctttaaaa aaattactaa   1380
tacataatag ttgtatattt ttatggggta caagtgatat tttgctacct gcatagaaag   1440
tgtaatgatc aagtcagaat gttaaggttg tccatcac                           1478
```

<210> 1621
<211> 601
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (292)
<223> n equals a,t,g, or c

<400> 1621

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aggaatncgg cmcgagcaga tagagaaact gaggtccaga cagggaaggg actagccctg      60
gggccccaca gtgccttttg gtgagacccc aggccaggcc tggagagaga caggcacaca     120
cacactaact agtaattccc actcaacaga tcaacagatt cctcttgcag gaacaagagg     180
aatttcgttt cccttccacc aacaaatcaa agatcwgtta tggtttcatg ctaaccgcca     240
ctgakgcttg gttggctttt ctctcttgct tatcacagtg acatctgcag antaccctgg     300
gcattctgta gaaagtgtgc actgcctggg gtgggagttg atggggggtta ggattaggta     360
gacccctct gtgctcccac aatctcctga ggaccctgag ccccagtcct gaccacatcc      420
tcctccagcc attcttgatg tgtctccctg ctcaattggg acttcttgag cacagggacc     480
cttgtacgga attatcttta tgtgactgtc acatatcttg gaggtgaact tctggagagg     540
gggtcagagg gagaggcctg ggtgagttgt gctgccttcc gtcatccccc tcagtctcga     600
g                                                                     601
```

<210> 1622
<211> 1120
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (994)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1045)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1049)
<223> n equals a,t,g, or c

<400> 1622

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gttgcagaat ttgggcacga ggctccccat gccaggttcc tgcttctcat ggtccttctc      60
acggttgttg ggagtttttcc tatctctcca gtgctcttgg aagacggttt atggtatatt    120
atcaagggaa gcctgaaagg gaaactgcta gttgtgttca ccacccaacg agatctggag     180
tcctgccttc tttctacact tagtcacaca gacctagccc cacagccctc tagttgcagg     240
gcttgattga gaaaagtatg cagaggccga gagtgtgtgt gaccgaccac atcatagcca     300
tcgaatgttt atcaattccc attcagtgtt tcagtgaatc ttcagtagtc tctgtgttct     360
ttgttagtca cctggtttag atgttccatg aattgttctt cctcttctag caatgatgac     420
caacgtctat gaattgttaa tatttaccgg ggactgtgct aagtgctttg catgtgtatt     480
tttcatttgg tgttcgctat aactaggagt aggttgtttt gctcctttca cagaggagga     540
aacaggcttg gaaaaggtca ctggcatgca taaatcccaa gctagtcagt agcagagcta     600
gtcggtagca gaactagtcc gtagcagagc tagtcggtag cagacctagc cggtagcagt     660
gctagtcggt ggcagagcta gcctttgaat tgaggttttt ctgactccag attccatgcc     720
ttaaactgac ttcctgaatg tatccactgg gataaatttc tcaaaatgga attggtagat     780
cagatgatat atgagtttaa aatatggata gatagttcca accggttttt cagggcattg     840
cctggtgttt accattcttg kgtatgtgct tatttgcatc ascagtattt atcttttagt     900
tttgctttta aaaacaaatc ttgtaggcca ggtgcggtgg ctcacgcctg taatcccagc     960
attttgggar gccgargtgg gaggattgcc tgancccagg agtttgaaac tggsttgggc    1020
aacatagcga ggcccaatct cccanatana taaatgatat ttttaaaaac aaaataacac    1080
agagcccttg gaaatcaaaa atctagcagg aggaaaaaac                          1120
```

<210> 1623
<211> 755
<212> DNA
<213> Homo sapiens

<220>

<221> SITE
<222> (512)
<223> n equals a,t,g, or c

<400> 1623
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gattttctgt aaattaaagt tgttttact  aaattatggg ccatatttt  tggatgtgtg    60
ctctgaaact aatactgctt gcaaggagaa aaaaaggaga tgcaagtgtg tctaatatat   120
tggatacata aaagctggag tatgcataat cgtcttgcaa gagttcttaa atctctgtat   180
ataaactgtt taaaagtaaa ttaaaattat tccttaatga aatacaaatc tgaagtcact   240
tgaataacta atcattttat gacccatgca gtgaattttt aatgcctact tctacctgat   300
tattttagat atgtctgtgt tgtaaattaa aagctacata aatcattaat gtgttgatac   360
agatcagtga actgcttaca ctatatgtga ttccttagga catacaatgt ctgattcacc   420
tccctccctt tcaattatat ggctgccagg ctctttttct ctattcattt tttgcaaggt   480
cttatttggt agaactgcat tccagggtct tnatcacttt cccaagagga actgatgttt   540
ccaatcaaaa gagggctcac actgcaaaaa tgaacaggtc ctaaatccaa gagtgtgaac   600
acacaatcta cgagggagaa gtttgctttt attttgttt  ttgttttagt aatctatgct   660
cccaagaaac tgtagcaacg aaacataacc tctgcacttt tttaggtcat tgcagccttt   720
ttaccttcct tgaaaatgtc gtgccctttc tgtac                             755
```

<210> 1624
<211> 2388
<212> DNA
<213> Homo sapiens

<400> 1624
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acgaggtaga aaccttgaaa ttttagaaaa catcaatttc atgcctaatg ttttgcctgg    60
tataattgtt gagcccagag actgtttgta cttgaacagt tcaggaagaa aagaagtaga   120
aatgattttt gttgctgcca cacttcctac tttttttgtat gagcttaaac ctatgtcttg   180
aacatttata tcaccattct tgccctgaa  cacaaatgaa tttttatct  ttattttatg   240
ctacatttct atacaattaa atttatattt tcaattgttt gtttgcttgc tcccattggg   300
agtcgttaaa gtgtaaacag ggcataggga ctgcaattaa ccttgagaac aaaagaacaa   360
tttatcactt taccaaacaa caaaattcac tcttattgtt aataattcat aataaaggca   420
gcaactatca attaagttga gaacagaagt ggcaaaacag gcacagtcat caaatttgca   480
atagctaact gctctattct gaattatcag cagtagctga gaactaccca aaggtttgct   540
gatggccaca gtacagaacg attagtgaat tcacggctgc atgtctggtt tgctctattt   600
cccaaactga gtaaataaat gagagcttgc taatcaggac tattaggggt tgctaggaaa   660
taaaaaattt gctactatgg gctgtctcca acctagcaag gagtttgaca caaaacttct   720
attacacacg gttaactagc acttaaaaca aatatatcta taagaattta tcagtactgg   780
tctgattcgt aggctacccc aaaaccctgc ctagccaatg aagtagctgg aatagaagga   840
aaggtaactg ttgccaactg attgaacaac ttttggttc  tttttatttg taacagtgta   900
cccccaaaat ctgaggtgtt tgagggttac ctccctctgc caaacaccta gacatttact   960
gaacagactt ttactacgaa gtgttaatgg aagtcaggga ccccaaatgg agggactggc  1020
tgaagccatg gcagaagaac ataaattgtg aagatttcat ggacatttat tagttcccca  1080
aattaatact tttataattt tttacatcta tctttactgc aatctctgaa cataaaattgt  1140
gaagatttca tggacattta tcacttccct aatcaatact cttgtgattt cctatgcctg  1200
tctttacttt aatctcttaa tcctgtcatc ttcataagct gaggatgtat gtcaccatag  1260
gaccctgtga tgattgtgtt aactgcacaa attgttcata actcatgtgt gtttaaacaa  1320
tatgaaatct gggcaccttg aaaaaagaac aggataacag ctatgttcag ggaacaaggg  1380
agataaccat taggtctggc tgcctgagag ccaggcagaa cagaaccata tttctcttct  1440
ttcaaagcaa taggagaaat atcgctgaat tctttttctc agcaaagaac agcctggaga  1500
aagagagtgt gttcctagca ggaggtctct gaaatggctg ctctgggaat gtctgtctta  1560
tacggatgta gataagggat gaaataagcc ccagtctccc gtagtgctcc caggcttatt  1620
aggatgagga cattcccacc taataaattt tggtcagacc agttgtctgc tctcaaaccc  1680
tgtctcctga taagatgtta tcaatgacga tgcgtgccca gtggaacatg caacttcatt  1740
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ttttattacc ttatgaagca tgtgatctct gtgacccgac cccttcctg  cttttctgga  1860
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tttggatttt atgtaaataa acagagtcat aaatttgaca ctctcaaaat atcccccatc  1980
agattcatgt aagacttta  ttttggtgat acttctccac aaccatcgca ctacaactta  2040
ccttaatcca ctcaactaac acttacatat ttggctttag agatgtatat caatatcttc  2100
tgtggtctgg agataattct tatcatatta gcaccttaga tgtaattgcc agtattcatg  2160
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```
atatgttaaa aaattattaa atgtctacta aatttgctac agcttagcta cttcacgaga      2220
ctctaaaatt cggttccctg ctatactctt aaatttcaaa tataaacata tatacctctt      2280
cccttgataa aatcttactt ccgatctgta tcttttcttg acactttcct tctcttgaca      2340
cttttggttg actgggtctg tatgttgaaa tgtctgcctt gatagata                   2388


<210> 1625
<211> 1245
<212> DNA
<213> Homo sapiens


<400> 1625
gaattcggca cgagtgcttc caggtaagag ccagctgtgg taaaagcaga tgggtatgta        60
cttgatcttt gtttactgtg tggtactctt ttttgtttca gccctgacgg gggtggctgg       120
tggagctcct agtgaaatgc actgaagtct ctgcaggggg gctgcactag ctccaagtct       180
tagacaggca gaaatgtgat ctctttccct gtcacactcc tgtactgggg ctcataactc       240
tccatgcaga tgcacactgt cgtctgtctc caggccatag tgtgattgag aaccgcagaa       300
gacacctctc ccctggctct ccactggagt ggtttcacgc tggaactcct cactcagccc       360
aatacagaca gctctgtggc tttcctgttc tccaatgtgg taatgctgct gattgaagca       420
gagagggaga ggggctccat ctttttggcac atgcaggtgg gtgtcagctg tggtgctgtc       480
agctggctgg gtcagcctaa gctcagaccc gatggaccta atagacattt acagattatt       540
ctacccaaca actgcagaat atgtatttct catctgcacg tggaacattc ccccaaattg       600
accatatgct tggccagaaa gcaagtctca atacattcaa aaaaattgaa atcatatcaa       660
gtatcttctc agaccacagt ggaataaaat tagaaatcaa taccaagagg aaaaaataag       720
gagttttttca ataggtagag gaaggagaat ggtgccctgg ggttaagaac acattaacaa       780
aagtacaaga ggcatgaaaa tgcagtgtgt aaaggaagag aaaagttaat gatgcacctt       840
catggtaaag gggtacaaag ccggaggtag tggactggac gaggcaaacc tccaagccca       900
gagcctgtaa atggcctgct cgatggtgta tgggaagcct caggcagtaa cagctgagtt       960
ggtggcagaa tacgcaggtg gtgggaaccc cagggttgat cacagacctg tcagcatggg      1020
ctctyagaag ggctycagct ggcagctgaa acggttgggt gggarcaggg tggccgtgct      1080
gstgktcttt ygctgaggaa ggcggactyc cttagctgga gcaagggagg ctggcagctg      1140
tgggatgcgt ggcccgattg cacttccctt ttataggagt ggaggtgtat ttcgctgttg      1200
gggacatgca aacgtgctca gcctccccct ctctccctgg ctcga                      1245


<210> 1626
<211> 431
<212> DNA
<213> Homo sapiens


<400> 1626
ggcacgaggt gaattgtctt ctccacatat ccattagcag agtgcatgtt cggtaccaaa        60
gggtggtgtg atgcaagctc tctttcctgc tgctctcgta gtttcctgtg ttgctgtgaa       120
atagaaggtg ggataaggca ctttggttct ccaggagtac tttcctctaa ctgccaccgt       180
ttttaagctt ctcagcagtg tttttcacac cctgctttcc gtgtgcatgt cttgtcactt       240
atgattaaac taaacacaag tttttccatt tttaatgctg ctatgcttct atacctctgg       300
taagtttgat catcgtgttc tgggttggga gggtgagagt tcttgtgatt ccctttgtac       360
ttccctgaca ctaacacatg ccctgcacac ccatcatgtt gcatcagtgt ccatggtggt       420
ggtataaaat t                                                            431


<210> 1627
<211> 1011
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (863)
<223> n equals a,t,g, or c


<400> 1627
gattcaaaat gcatggccca gctgctcctc atattgaagt tgcgaccatg ggatttggca        60
acattgagct ccggctctgg gcattgctct cacagctgag agtgacgccc aggctctggc       120
```

942

```
agcccagact tgtcatcctg taaatgaaca atccccagtc cccgggcctc attttattca    180
cttggctgag ctgcctgttt gctttccgtt ctgtgctcgc cagctcacta agcaagagga    240
tccgtgcctg actgcgtgga gaagctgtag aggaaatggc caccctgact gtcccagcac    300
ctmccggggt ggcccggggc ctgggscctg agcagaactg tgataaaggg aagcagggaa    360
gcagtgcgag arccctgacc aggtgcarga gcctgattcc gaatccamct ctgccatggg    420
cagattgcat gatgccatca gagccctcta amctctggcc ttcagttgtc acacctgtaa    480
aatggggaaa tattctagag aagtggstca aaacctgatc atccatcagc ytccccccaa    540
gaacatgggg acagtgcaca tggcaaggcc ccatgcccag agtttctgat tccacagttt    600
gggatgaagc ctaagaatgc gcatttccaa caaggcttct ggtgaggctg atggcccagg    660
gacctcactt tgggaagctc tgtagtaaat ccagtttctc agccagtctg ctctgtagag    720
ctcctgagac agactctttc cctaggcctc ccctgaggtt cttacttaag caagtctcca    780
tttttcaaaa gctctgccag gtaactctat atggcactag ggctgagagg cacttggtgg    840
atgtttctaa gatcccacgt agntctcaca tgccaggatg ccatgatttt gaagcagagt    900
gcctcctgcc ttgccaaggc tgacagcaca cacagggcaa aacgccatcg tcacatattg    960
gaatttcact ctttgaaaac ctggtaatcg tgtgtcccat ttcagctcga g            1011
```

<210> 1628
<211> 569
<212> DNA
<213> Homo sapiens

<400> 1628
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attcggcacg aggacttatt kgggctaatc agcctaaaga ggatgatgca tataatatgc     60
ataggagaga tctctctgtc tgtgtctgtc tctgtctctg tccctctctc tcccttttctc    120
tttgcaaaac acgcattcac tgttgccgtg aactgccaca gatagctcca tagtgaaact    180
gaggctgaaa agggtagagt aggggcacaa agtgagccgt ggctcttcat ggcatcactc    240
agactcagct gccttgagcc agctccaccc ccgactccca ggtattcaac ataataaatt    300
tggtggtgtt gttttgtttt gttttgtttt tgtttttgtt tgctttttt tgagatgtag    360
tctcactctg tagcccaagc tggagtgcag tggcatgatt cggctcactg caaccttcac    420
ctcccaggtt caagcgattc tcctgcctca gcctcctgag tagctgggac tacaggtgca    480
tgctaccacg cccagctaat ttttgtgctt ttagtggaga cacggtttca ccatgttggc    540
caggctggtc tccaactcct gggctcgag                                      569
```

<210> 1629
<211> 1223
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (243)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1218)
<223> n equals a,t,g, or c

<400> 1629
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ggcagaggcc agactttgga cctcccactc agaggtttct gtctccatca ttctgacctg     60
ctgcttgtcc acatgtgggc cccaactcca cttatccacc taggacttgg taaaatgcaa    120
atctgagtat gctgcttctt tactgaacac ccttcaatgg tttgccaagt ctttagcatg    180
tggcacatga tgtccttcac accctgctcc ctgccttgtt ctttggcctt gtgcctccct    240
atnggccccg cctgcctgcc cccggtcccc ctccccctca cctccaacat ccaactgaaa    300
gccaaggctg gtttgctcct gagacaaagg ctctgctcca ttgcgtcagt tcacctccct    360
gccctgctgg tgtcagcaag gtaacaatca agctggtgac cccaccagcc tcatctccca    420
gccggtcctg ccaaaccttc ttgacattgc cagttgtga ccgtgaaggc cacatggtcc    480
tccaaatcst ttctccccaa gaaaaggtgc aaaattgaag cacacatgta gggggaccct    540
gggagttcaa ggagcccagg ttagaaatcc ttaaacccag cctgcttcac acaggggctg    600
gcttgatgac cgtgagtgct gccttcacct tttccccact gagctaactc ctaactcctc    660
acccgtgaca cggctcaaga tcgcttctct tagaaggaag tcccgatccg ctgctacccc    720
```

943

```
acatggcccc caagctggat tggtgcctgc gttcgttccc agcgctgccg tgaaaagtga    780
ctacaaaggg agcagctgga tacaacaggg atttactcct tcccagttct ggaggccaga    840
aatccaggtg tcaggaccgt gctccctctg aaggccctag gggaggaccc ttccttgccc    900
ttctcagtgt cccgtggtgt ctggcatcct ctgtgtccct cggcttggga cagcccctct    960
ctaatctctg cctccacctg cacatggcca tcttccctga atgtgcctcc aaaactctct   1020
cctttataaa gacaccagtc attggacata agccccacct tactccagtg tgacctcatc   1080
ttaaatccat gacatctgca aaggtcctta tccaaatggc ccttatccca ataaggtcac   1140
attcacaggg atcaggggtt aggcctggaa cgtatctttt tcagaacact attcagccag   1200
cccacaccag cgcccccnac agg                                            1223
```

<210> 1630
<211> 1626
<212> DNA
<213> Homo sapiens

<400> 1630
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aattcggcac gagacaacac caacatatct gcagcccata gtgcaaatgt ccatgtatgt     60
cagattaaat gttacttatt atttaggtct gttttttaaa ttaaagtttg cacttgcttt    120
gcagccagcc aggcagggag tcattaccta gctctttcac ttactcatgt gccaatgtga    180
atgtgttact tcacttctcc tgcctcttgt ctacagtggg caggaggtaa gcctcacggt    240
gtgactgtga agccaagtga aatctcacac ctacctcaga ggcctttttc ccactctcct    300
tttctgactc ttttaatatt ttctcaatta tttatagtaa taataataat acaatgccaa    360
ttgttcattc attcatccat ttaaatccca aaggaattta aagaagagt aacatttaac    420
ctgacaaaga caaaggagg aagcttttta ggtaatatta attatcataa agcaacaata    480
ataacaacaa taataatagc aagctcatat aagcaagaag caatagtcag tgtgtcatgt    540
tttgggggaa ttaagaattt caaatagttc attttaacac caccttctc attccttatt    600
ctcctacccc actggcctga tcacttctag aaacttccag attctttacc tcttcatgac    660
atttataatt gctgttcttt ttttggaggt acaatataca tataaaattt accatcttta    720
tcatttttag gtgtacagtt cagtggtaat atatctaaat ttatattctt tattttctg     780
ttctttatgt ctaggacatt tcaatcctca acacttcaca ttgctaaatc ctcatctctc    840
aagcctcagc ttaaatatta ccttttcaga gagaccttca cagatgatgt aatataaatc    900
actctcccct accattattc tcaaagacag aaatctattt tctttatttt actaatcaca    960
ggctgaactt attttgctga ctttattatc tggctctcct acttgacagt aagttcaacg   1020
agggccagga caaagtctgt accccagcag ttagttagcc tgggttccat acatatcatt   1080
tactcaatag ctatttatta actggataaa tggaaatgaa tgcaagtgat agggatagat   1140
acaggaagag aattagataa ctaaaccaag gtcaggaaat ggcatggcta aacgtttgca   1200
ctaaatcttt aaaactctgg aaaaatcctg gaaggatctc agtggacaaa tgcctccaat   1260
acgtttctat taaggaaaat cactctcata agaatgtagg ggaattgact ggaatgagag   1320
aactgaggga gggagatcca ttaagggtct gactgcagta attcagatga gaaatactgc   1380
aaaagcttag gctaagttag tggctataaa gatggaataa atagagtcaa gggttattac   1440
aattgaacag aatgtggtgt ctgactagaa ataaaaagac aatctagaga agtccaaaat   1500
gacttataga tttctgacct gggcaagtga atagattaga aaacaagatt tgtagggaaa   1560
gatgaaaaac agttattgga tattttgaat ttgatgcaat tattggatat gtttcagtct   1620
ggagct                                                              1626
```

<210> 1631
<211> 1347
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (830)
<223> n equals a,t,g, or c

<400> 1631
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tctcccctac actcctctcc agccacagga gttcctttra attcttggaa catgccccat     60
tcccacttgc ctttrggact cactcacgct gtccgtctgc ctggaacacg cttcctcctt    120
ctgcttgctt ggctcagtct tacatatcct ccagctctca gcttaaatat cagttcctgt    180
agggaagcct tttctgtcac ccagtctagg attgcactca ttatatgctc ccaaatatag    240
tgctcccttc atggtgcttg gtatgcctag tgcaattctc gttactttc ctgagtccat    300
```

944

```
ctcattctcc aagaattgtc accactggtc tttatactcc tggaaggcat gaacccaatt      360
tattgtcttg ctctctgctg catctctgat agccagccca atgccttgcc ataattgttg      420
aaacaaaatg catgttwatc tattgaaaaa aaaatttttt tttgagawgg agtttcactc      480
ttgttgccca ggccagagtg caakggtgcc atctcggctc accacaamct ycgcttccca      540
ggttcaaggg attctcctgc ctcagccccc tgagtagctg ggattacagg catgtgccac      600
cacacccagc taattttgta tttttagtag agacgggatt tcaccatgtt ggtcaggctg      660
gtcttgaact cccaacctca ggtgatcctc ctgcctcggs ctcccaaagt gctgagatta      720
caggcgtgag ccacctcgcc cagcctattg aaaatttgar ttggagaata aaaggatttt      780
ggaataaaaa ttaaaacaaa gcttcccatc atwggayccs ccttatgtan cttgtacctg      840
tggcaaaata cggarttgtc ttctatcart tcttctgctg aagcccaggg aaarartgtw      900
tgtaaaaatg tctccctgtg gctgagagcc agctttatct ttttatccta gtctgggcta      960
tcatttttat ttttattttt atttttatta tattagagat ggagtttcac tacgttaatg     1020
ttgtccaggt tggcctcgaa cccctggctc aagtaatcct cctgcctcag cctcctgagt     1080
agctgggact acagggatgt gccaccacac ccggcttatc atttctaaca tgaaaattta     1140
aaagttaact ttaaatttaa tgcgttaaag taatctaacc cagtaacata aaaatgtgaa     1200
gttgggctgg gcacagtggc ttatgcctgc aatcccagca ctttggaagg ctgaggcgag     1260
cagatagctt gagcctggca gttcaagacc agcctgagca acatggcaaa accctgtctc     1320
taccaaaaaa aaaaaaaaaa aactcga                                        1347

<210> 1632
<211> 741
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (86)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (92)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (640)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (673)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (696)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (712)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (713)
<223> n equals a,t,g, or c

<400> 1632
ggaaacagct atgaccatga ttacgccaag ctcgaaatta accctcacta aagggaacaa       60
```

```
aagctggagc tccaccgcgg tggcgnccgc tntagaacta gtggatcccc cgggctgcag    120
gaattcggca cgagtccata cggggagcac ccagcaaagg gccccgcctc ccactctgct    180
ctgtggtggc catggggatg ataatttggg taaacccaac tggcttctgg gagagcaaga    240
aaggatgtga ggggtagggg atagaacagc ccggggcaga caaagaacct cagcccaggc    300
aggtagggaa cttgagacct ccaaggtctg atttcccctc acccccaccg gagggctcca    360
ttttgtactc tctaggctgt tggcaagaat gcggaccaga ctctggtgat aactgctctg    420
agcaccaggc agctcttggt tctccctgct gatggggggc tcggtggcac acttaatcct    480
ggaaccatca ctcatccacg agccacttgt tgagccctg gcactctctc ttgtcccagc    540
atcactgctg accctgtcag cctctgagcc cttgctcgaa gggggccccg gtaaccaatt    600
cgccctatag tgagtcgtat tacaattcac tggccgtcgn ttttacaacg tcgtgactgg    660
gaaaacctgg ggntacccaa tttaatgctt gcaganattc ccctttttgca anntgggtta    720
taacgaaaag gccgcaccga t                                             741
```

<210> 1633
<211> 962
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (294)
<223> n equals a,t,g, or c

<400> 1633

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ggcacgaggg cagactcagg gcaaacaacg ggaaaataaa aactcaactg gtgaagtcag     60
acaggctaag ttgagctaca taaaggggaa ctgagccaga caagggagga aagagaggtg    120
gaggaacctc acaggttggt tgtcgtggaa agttttttgtt ctggctgtga aagtaagaag    180
gaacataaga tttcaggaag cacctgccat ctggatgaag gagattgaga atggcagcma    240
ttggggartaa tggattttaa agatatcttg gtgtgcatta aatgcactct tcancccttg    300
ggcttttttct ttagagactg agtatagatt tgaattgctt tagattatat attttttgaa    360
tgacagctgt ttctttgaat gtgactccac accaagattk gaccacaaag ctgcctggca    420
tttacagaag aagccaaata taacatggat caatggtaaa ccactcttga taaatacaga    480
gcgggcatct cagaracccc gttagcttca cccttgtgtc ctgagatgct ggctctgacc    540
ctggggggctc tgtgaagtcc agtctgaaat caccctctag atccacccac agtcccttcc    600
aactctaaaa gtcattgtgc aatgccagcc ttgcctcact tttagtcaca gacactgacc    660
acagggaaat gtagactctt tctgattaca catctgagtt gccacatttt ggaaaagatg    720
cccttggcat ggagcctcta ccggctctgg gccatggggt gtggtttttgt gaatgggacc    780
cactgtggtg ccatggagtc caggtaacat gacccagttc tctgccttgc ctcagagcgg    840
acgtctagtt accaccgcca gcctctgcaa gacttctctg attacccaat attttcctct    900
tgtctgcaga catgacttct cataaatccc tttgctgtat cccctttgga acagggctcg    960
ag                                                                    962
```

<210> 1634
<211> 943
<212> DNA
<213> Homo sapiens

<400> 1634

```
gtgtattttg ataactcagt ttcccacctt ttttctccaa tcagagtccc gcaagagctt     60
tatttctatg ctgcaatttc aaatgaccta caaattctta gaagtgtaaa gaactaaaaa    120
tatgtaacca actaaaattg ggttgtggga ggctgcagaa agcagagaga gactaattca    180
ccattgctca aaataaagtg tcaatactgt ctaaagaatg tactctccaa acttcacatc    240
aaacttttttt gggatgcagt gcgatgtggt acagagagta acaggttttg gagtcagatg    300
gctctgaatt ggttgacact cttactaact tggacattcg aaagttatgt agtcacttat    360
tttcctcatc tgtagagaaa ggctacactg gtgaaatgag atcatgaagc taaaatgccc    420
aaaggtaggc ctggggcaca gttggttatc attaataata gttattatca gttgtagata    480
cttaggagga ctaaaataaa tatggaaccc aatatcctag tagatgagta agagagggtt    540
cgcagacctc gtgggtgtga acgtarggag tgttgtatgg agtcagacca accaaacaaa    600
gggagttggc atttgcggtc actcagattt tatgcagcca ggttactgct ggctctggat    660
ggttgacaca cagtgtgatg tttcactgca tttgtatcaa gataatggcg caaccatccc    720
cccaaaatcc agcattattc ataatcgcat ctttcatcat caatttgggg aaagtctttg    780
```

946

```
gtacacagtc aattcctggg gatgcaaatg atgatttctt cctttttttt ttgagacgga        840
gttttgctct tgttgcccag gctggagtgc agtggcacta tatcggctcc ccacaacctc        900
cgcctctggg gttcaagcga ttctcctgcc tcagtctctc gag                          943


<210> 1635
<211> 1120
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (68)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (133)
<223> n equals a,t,g, or c

<400> 1635
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gaatctcnat gggcctcagc ttagcaattg tgagggtggg tatgcaggag gtggggtgtg        120
aggaggggct ggnaagcaac ctttagaagc aggtctgaag ggacttgtca ggggttcccc        180
aggtaggaaa taggggtcac ctgtgccccc agcccacctg ccattgaggt gctagccccc        240
agaggctgtt atctttgtat agatgctggg ggcatcagga cagcctgaaa cactgtttcc        300
aggagtacag catagaaaat aagtctttcc atccaaattg gaaatgaaaa ggccctggta        360
cttgacagat ctactccagt gacttggaac actgtgtggg agacttgtcc ttggcagcag        420
tagaaatggg gcggctctga actttctctc tgtaacccca ggcacatgtg tgcagacttg        480
ccaggccctg tgggcmaagc ggatgtagga cctggctctt atccgggcat ttggtaactc        540
gaggaaaatg gacttttcct cttctgctgc ttttgttttt acctttgggg ccttatcatt        600
tgtggcatct gccctctagg acctatagct tttgggactg ctggtagaca cctattctac        660
tagcagagtt ttttccccca aggcaggtgt tttgatgagg gcttgggtca cagcctcggg        720
actcatggct gctctgtatc ttccatcctg ctggcctgga ccacacggtt ccatgacttt        780
gccagattcc ttggcaggtt tcattaagag agatgcacag gccggacgtg gttgctcaca        840
cctgtaatcc cagcactttg ggaggctgaa gcaatcagat ctcttgagct caggagttcg        900
agaccagcct gggcaacatg gcaaaacccc atctctacaa aaaatacaaa aattagccca        960
cgtggtggca cacacccgtg gtcccagcta cttgggaggc tgaggtaggg gttgagccct       1020
aggggttgag gctgcaggaa gccatgatag ttcccctgca cacttcagcc tgggtgacag       1080
agcaagaccc tgtctcaaaa aaaaaaaaaa aaaactcgag                             1120


<210> 1636
<211> 402
<212> DNA
<213> Homo sapiens

<400> 1636
ggcacgagca tttgcacaca cagccacaaa cttgcacaag cagcacttgt acactgacac         60
atatccgttt gtgcctatac agtgcacact tacacatttg cacacagctg tgcttgctca        120
cacatttgca cacacccacc tacacacttg cacacatact acacacttga gcgtgcagca        180
cacataccta tgtgcataca tgcacatttg cacatgcaca cagcagtggc acacacttct        240
ctatcactct ccctagtcac tgttctcccc tgtgattccc accctctga ccgcccctgc        300
tcacttgctg cccctccac tggaaggggc ctggcctggt gccctgtctc tgtctgtctc        360
caccgtgcag ggaggtttca caaggactgg ctgatgtctc gc                          402


<210> 1637
<211> 214
<212> DNA
<213> Homo sapiens

<400> 1637
ggcacgagcg gcacgagtgt atgtgtccct ccaaaattca tctgttgaaa cctaagaccc         60
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947

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aatgtgacag tttttaagatg tgggaccttt tgggaagtga taagtcccga tggctctgcc      120
cacatgaatg tattagtgag tgcccttgta acagggctgg agagtactat ctacgtaggc      180
cctctttgcc tttttttttt ttttttttcct ttct                                 214


<210> 1638
<211> 570
<212> DNA
<213> Homo sapiens


<400> 1638
ggcacgaggt cgcatgggca gccctggggc tctgttagct ctcctcccgt cccttctccc       60
ttttcctgg ggcctgggtc cctggccact actgtcctca cccaagacgt aggcggccac       120
caactttgt cccagggaga cgtgcaggac ttgaggcagc tggctgcaga gttcgtccgg       180
gagtgggagc agcaggaagg ccacagacac aatccccgtc agcaagaaga ggaggaagga      240
gctggtggcc agttgctggc gggggtctga gaaacaagac tcatcagatg ctgcagcccc      300
cactcctgcc cagcccaggt cctccaggga gaagcctgaa caaggaagat gtatctactt      360
tttttttttt aattatcttt tattttttgt agagatggag tcatcactac gttgtccagg      420
ctggtctgga actcttggcc tcaggtgatc ctcctgcctt agcttcctaa gtagctggga      480
ctatgggttc atgctaccat gcctggctaa tttttaagtt gtttgtagat ggtcttgcta      540
tgttgtccaa gctgatcttg aactcctggc                                       570


<210> 1639
<211> 1811
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (5)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1024)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1127)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1160)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1728)
<223> n equals a,t,g, or c


<400> 1639
ggcanagttt tctgctaatt ctaaaataca tgtcatatct cagtctgatt ctaatgagtg       60
ctttgtctct tcaggctgtg tttttttcttg ccttttagtg tgccttgcaa ttttttgttg      120
aaagttgggc atgttgtaat tggttataga aatttaagta actaggcctc tagtttaagg      180
atttatgttc atctgggtag gagttagtct ttgtttaatg tttactgtag ctatagatgc      240
cagagacttc cgcttcctct catgtcctaa tttttatctc ccttttgact tctagcttct      300
ctaagtattc ctcatcagaa agagtttatt tcttgcattt cttttatcyg taatccatta      360
tcatgctccc ggaaccctgt aggtctggag gtaaggcgtg agaacattct ataatattcc      420
agttcaattg taatctttta gtagtctggg tctttgsctg gtgaccttca caaacattta      480
ttctttttttt tttttgaga caaagtctca ccatgttgcc cagcctggag tgcaatggtg      540
```

948

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cgacctcagc tcactgcaac ctccgcctcc tggttcaaat gattctcctg cctcagcctc    600
atgagtagct gggatttcag gcgcacacta tagtcaccca cttaggtgag ttaagaaggt    660
taaaggggc tgaagtgaga ggaatctcct ccctcacatc cgttggacaa ggtcctgata    720
aagtatttct tcataagagt aggacttta ttaatggaga gggctctggg tatattgctt    780
aaagattagt gtttctcttc tgctgttaga cccgccaaat atttgggggat tttccagtta    840
tctttcatca attgatttct agttcatttc cactgtggtc tgagaacaca ctttgtataa    900
ctcttattat tttaagtttg gttagatgta cattatggcc cagaatgtgg tttatcttca    960
ccttgaggta aagtccatgg ggcccaggcc attctttctt ccaagctagt acacactcag   1020
cctncagcaa ttcactgaca ttgccattta agtattccta ccagtttatg gcactagtgg   1080
attttacccc aggtaggtag atcttggctg kgagtctctg gatttgnctc tctagatttt   1140
cgaaaggcag tttgscttgn aaactcagkt ctttgatgag ttcaagaaaa gttattgatt   1200
ttctctttgc ttggcttttt cttgtgggga tgggactgat gacatccagg ctcttttaaa   1260
gttggggctg aaacttaagg ttcatctttc atcttacgtt tttgrtacat attcctmwgt   1320
tctactgktt ttagcwttcc tatatctgac tgcccttagt gtaccttcta tactcaatgt   1380
actgctaaat cttgtccttt ttagtccaac ctaaaagtct ttctcttggc ttgtacattt   1440
acatcattta cattgatcat agtttctgtg aaaatgtttt agtttcttttc acgttatctt   1500
gtatgctgtg tttgctttat tgcttctttt cctgctttct actctattgg ttgcattttc   1560
ttctgacttt aaagttatac tttcattttt ttttcttctg gaggttacac caggccaatt   1620
agggctcata actaaattta ttttctttta ttaattttta agtttctata gcctatcttc   1680
cttctgaatt aaagaagtat ttttgcacac ctttaaccct cagccacntc tggcttacca   1740
tgaccacctt ctacccacca tcccctcggt attatgtgtt ggtattctcc aggattaagt   1800
tcagactcga g                                                         1811

<210> 1640
<211> 462
<212> DNA
<213> Homo sapiens

<400> 1640
ggcacgagcc cagctttagt tgctggtgcc cagatcatat cgtggaattg tacaggtgta     60
agttaaaaat aaacttagag caaatgattc tcttttgatt ccctacccaa tccacactct    120
tccctgtccc ctctatgtca ttcctggcag gtggacatga agctccaggt aagaggcaag    180
catccgtgtt caaatgacca ttcccagttt gaatgacttt gtttgcagga tcttacttct    240
gcttaactaa atttgtaccc caccctctat gcacttaaaa tcccttaaa attcgttgat    300
ccttagttac ctccctggag ctccttctat ttatacacaa taactggttt ccaaatattg    360
aaaatcaact cttgtagccc ctctagtttt tgtttactta cttgcttcat tccccacggg    420
ctgaacactc cagttccctg gactttctc atatgatatg ta                       462

<210> 1641
<211> 534
<212> DNA
<213> Homo sapiens

<400> 1641
ggcacgagaa aattcatgaa aagtatctct tttttttcaat aattagcagt cttcataagt     60
ctgctagtgg tgttgattac ttatttaata tttggcttac tggaaaagac gtccttaatt    120
ttatctttca gtgtttcctg aatgactcca ttcccctttac tctagtaatt agcaagcatt    180
tttcttgaac acagaataca cacattcaca cacttcagtt tttaaagcac agttaggcaa    240
tgctaataga aaagtgccag aatcagaatt ttcttaattc ctctgtgctc aacgtctctt    300
cccatcccca agttcttgcc attggggaga aaattcttac ttttgctatt tgatttaatc    360
tttaattcta tctccatgat tttctgtttt gtttttttt tccttaggat gactgtcttt    420
tgaaggtttg gtataatgta gaaaactggc ggacagctgt tacttctcca gatggaagtt    480
cagaaaaaca atcccaagga gaaattgact tttctttgt gtatctggcc catc          534

<210> 1642
<211> 1011
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
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949

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<222> (383)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (925)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (948)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (976)
<223> n equals a,t,g, or c


<400> 1642
agcaaaaaga tacacgggcc taagataaaa gatcaactaa acgtctcgta aagcctctaa      60
acagggcagg aaagcctggg ccaacgtgga gatgttacat caaaggcagc agcagctcag     120
tgatcctcac acacagtggg ctgaagttaa aaaaagcaga gtcatcagtg gttcacaatt     180
tacattataa ttgtaattta ttatttgcat gtatagttat attagtttat gctttgtttg     240
atatttcatg tttaccatat ctttatttga aatatagtaa atatttattt ctatacatat     300
ttggaaaaaa tatattctga acaacttttt cttaatgcta gcatccctgg tgttgtggca     360
cttttcagaa taaaccctag canggtcaag atgattggca ttagccttct tctttaatca     420
tctcaaacca ttgttccctt tgcttactat agtctttctg tgtttgcctc cttttcattt     480
cttactctaa actctttcct gccatagcct ttgcatttgc tattcccttt gtctggaatg     540
ttcttgccat gactctgcat agtggcttta ctgacacata tctacaacac ataatttgta     600
cagagatcta aatatttttt ccagatttac attcaatgac ctttgtataa cagatatttc     660
tattatatca agtactgtgt tatctacttg gaaatattgt cctatcttaa ctttgccact     720
tgtcaattaa ttaatatcat tgccatttga ggagtggagg aatttcagag tggcttagtg     780
awtgcacaaa gtcatacagc taataaacaa caatgccagg gtttgaaccc agggtttctg     840
artttggatc tcttttgcat taatctctga catcactcat gcttttgcct ttctgtatcc     900
agcagtctct cctatctatt tttantaata atcaatggta gttttgnaa attgtactcc     960
tgtgtaactg aakgcnttta akgctttaat ttgmacttgt aataatcatt g            1011


<210> 1643
<211> 1665
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (1004)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1010)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1122)
<223> n equals a,t,g, or c


<400> 1643
ggcacgaggg aaaagttaga aatataataa tgttagacct taagagtagg acccacgaaa      60
gttgcaaaca cttctagcct tattattcac atacctctca tgaagtttct tggttcttga     120
ctctttctat tgctaccggt tacaacttat gaaaatatta catattgaca tggcatgagt     180
```

950

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ttttactatc gttaagccca aaagctttct cccgctgctt caactctaaa gaatgatcac   240
cggaaaattc tgcattgact tcccaggtaa tatcttacct cagagttctt tatgcctctg   300
cactggtggt ggccattcac actttgggca ggttcagggt agctgcaagg tcaaagcaca   360
gtatctggaa cgtaagtgat tcagtatccg tctgttgaat gaaggacact tttaagaaay   420
tttctytctt ctagactaaa kacagagagm gaggaagatg aaaagaaact acaggctcta   480
tctgggttat gctaacttca aaaatagaag ggaccagtgt aactgggtaa cacagaaagg   540
gggaagatct gaagacttct ttggaaattc tagcaccaga cagccacagg aaagaaagga   600
cccaaggact ccaaaaaata ttacacaata gaaaagctgg gatttgggga tgaggcctac   660
caggaatcca tcagcatgta cttcaaaacc tctgttacta aaaagacaag ggaagaagtt   720
tggcccaaag agccaagttg gaattgctga tattatacag ctgaccttgg gtaagaagga   780
ggagaaagtg tattaagcgt gtatcagttg ctaacagcc aggctgtgac tgcttattca   840
gagaactagc attcagggag gagggcttgg aggctttcca tgcaggagtg ggaaaaatgc   900
ctcttatttc ttttctggga tatgcaccca aggggagaga caaacttgaa accgcataca   960
atatgggaag gttctgggct tggcatatta tagcatctct tctncttttn cacaccattt  1020
tctycagaaa caactctgaa tcacaagaag ttaaggaaaa tgcaatttca accctgtgta  1080
gaattgagag acacctcaca aatagatgtg gttcccagat ancaattttc tagggaatct  1140
tctcaggtac ttggtgtgga aaggactgac ccatgtcaaa ccttgtcacc tctcttgtgt  1200
ttgaatacaa aatgtggcaa aactaaatct tggcttttct ggggacaaat aaatatgaca  1260
tgggtggatt aatggaaaga catttaactt tcagtttgca agatgaaaat atatctgtaa  1320
aaaatcctac cacaacagta ttcaaaccat atgttaatgg ctcaaaacat ctgtagtact  1380
gtaacttgtc ctgaaaaccc tgctggtttt aagcactgac gggaaacagt atgcaagctg  1440
aagagaaaac cgcttttttga taaatatcac ctcctccttt aaccagttca cccctcccc  1500
ctctcaggat acccatatag ttcgcaaagt gttgttacat aggaaattct aactcttctc  1560
agagttttcc aatctataaa gcagctaatt tgtacaggct acattctgaa gctaagaaaa  1620
cattttcaca caataaagaa gagtaaagtc tggaatgatc tcgag                   1665
```

```
<210> 1644
<211> 963
<212> DNA
<213> Homo sapiens

<400> 1644
attgggtacg ggcccccccct cgagcattct gcagggactc atcctggggc aggtgggggtc   60
agagggcaga tggccaggag cagagccaga tggggagcaa cagccttccc tctgccagga  120
cagggagaga cctggctgcc tcacagtgag aggtctggca gccaggagg gcactgggga  180
caagggccca gccgggcacc ctacggagca catgacccc acctgtccat ggagcacacg  240
acctccacct ccagctgccc ctgtgctgca gacaactccc agggtggcga gggtggcatc  300
ctgatcccag cagcgcctgc aggactggga acctgctgcc cacccacccc ctgccacttg  360
ctctcccttc cttgcccaac cccaggagct caatgcctgc tcagggcrgg aataaaraggc  420
agaggagggg tgaggagaga aaggagtcat taggggcctt gctgatcctt cgtggcgcct  480
ccatgtccct atccctcatg caaagcacta acctggaggc ggagcatttc atcgaagcaa  540
agcatctcct gccaccaagc acgtccacgg tgttggggat tgattgcttc tatcctccag  600
cccactctac ggagcacca ccgtgtgaca ggcgcggcgc tgggcaacga ggataagaaa  660
atgaataggc cacgacatgt cgcctgaga agtcacagac tcagacggga gacaggctcg  720
ataccacaca ccaaggtctg gatgcacaca ggacactgag taactcctgc agggtgagcg  780
ggtttccagg gcactcgaca accggcagag tctggaagca gcctggaggg gaaagggcat  840
tcctgacggg ggcacagcag aagcaaaggc ccagtggcat gaaagaccaa ggagtgttga  900
gggaacagag agcagcttgg tgttggggcg gcatcagcgg gtggagctgg agccgctcgt  960
gcc                                                                963
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<210> 1645
<211> 1573
<212> DNA
<213> Homo sapiens

<400> 1645
ggcacgagtg ataactgtcc aaagaaatga tttttctttg ctttcttggg gcctttccct   60
tttactttga taagtctttc aaggggtttg cagttccccc ataatcgttt tgataggaga  120
aagatttttaa attgggaagc tcacagaggc aagaggacag cgtttctcag aattccagtt  180
tgaccctccc ctaccttct tccttgccac aggccaagga gcgggagctg gaactgaaga  240
acacctggtc agagaacaag ctcagccgcc gtcagaccca agccaaatat ggattctagg  300
```

951

```
gctctggaac tgattgctcc caggatctcc tgccagccca gctggcctgg cccccagctt      360
cacctctggg accccagctg ctctaagccc aggatctctt tccccaagga cccagccctc      420
gcctctgcga gaatgaacat atttgataga ttttcttaac aagttagaaa attcagctcc      480
ttctgtcctg gagctagcaa agacttgtgt gatgcctccg aaggggctct gagttctggg      540
gtgggagttt tgctctctgt caggtgtgat aaaatgttga accctcccca ccaccacttt      600
ttttttttta aaccagggat gtctgttgaa ataaaacatt cagtctgaca aacattgcct      660
gccctgtccc tggatttgtg tttaccttgt gtaaagcacc ttccaaatga tcttgagctg      720
cctgattgct ttgctatttt tcctctctat ccaccatcta gctgggtttg tggccattgg      780
aaaccctaga aatggtatgc acaactttat atgaggcagg atgattttca gagaggcctg      840
tgatcccaaa tatgtattgc caatctcagg tacctctgga gactgggtga agtcaggagg      900
tttttttctgt agtacaaaat agtgtcaggc ataaaaatcc tatccagcag gaggtaaagt      960
ggcaaaatcc ctgtccctga agatgattca gattgacgct ggtagtcact ggtctggatc     1020
agtttggaag cttcacattg aacttgggtg ctagagagat acccttggag acttccagag     1080
ccctagcctt cattgaagaa aggagtacag ggtctgtaga ctccaattat ctgtaaggca     1140
ctgtgacgcc cagaagtggc aagacggatg ggatgattcc aaaaacagtg tgcaaatcat     1200
actgcaaacc accactgaaa aatatggcta agggtactag gatccagtag ggcttagctg     1260
ctgtggtttc ctgcaggaaa gtagcgttga ggaaactcct gcagagaagg caggagtgtg     1320
gtgtgggaaa tgtgatgaat aaaagcactg gaaagactac agctggctac catcaataat     1380
gaagagaaca cagaagagtt gcatgctcag aatctaggga ctccaggatt tctgaggtgc     1440
tgttgtgccc acacctcaaa aatgtgctga gccaggtccc agcttgaaac aatgaactaa     1500
ccggggccgg gtatagtggc tcatgcctgt aatcccagca ctttggcagg ccaaggccag     1560
ggtaggtgga tca                                                        1573
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<210> 1646
<211> 1361
<212> DNA
<213> Homo sapiens

<400> 1646
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ggcacgagct cgtgccgctg acataggaca ggaatgagcc ttagtatctt tgccatgacc       60
agttgttggt acgtggcctc accacaaaca cagtgatgga tttcagagcc cagcagctga      120
ggccgatggt cagttatgct ctcatggtta aaggtcttcc aggcacattc tcatgacagc      180
cacgatatat ttttgtaaga aattctacca aggcaaaata tgattaagat aggtagccaa      240
aacaaacaaa aaagaaagaa aagccgcaaa ttcctccctg cttgctcttt atgcatgctc      300
ctttgcaatg tgattttgct attagctcca tcaagagatg ggtctcctga atctgagctt      360
gaccacgtga attgctttga ccactggagc attcacaaac atggcacaac ggaggcttga      420
aaaatgcatg tgccttggga cttgccctct cttgttactt ttggaaccag agacctccat      480
gcaatgagcc tagactagcc tcctagaaga tgaggacaag aagaagcaga aatcaagcac      540
cttcccacca ccaggcatgt gagtgaggcc atcctagact gtccagcccc agccaagctg      600
tcagtgacca cagagaccag ctaagccaaa ctaaaaccga aaggactgtg ggaaaaccta      660
tagtactgtg agaaaccata aatgcttgtt gttttaattc actcagtttt gggacagtgt      720
gttatgtagt aaaaactaat tgatatcatt tatgtccatt ttatagatgg aggaactgaa      780
acctggagac atgagaaagc ccctcaatga atggaagtct caaggtgttc attggtcttc      840
ctcagagcct cctacagcaa gctgggcttg atcggaaggc tctgagtttg ggggtagctt      900
tactcatttg tgttatttgc ctaaaccctg gagtctactg agatcgagac ccccgaattt      960
gatcattaat aaatctcttt tggatgaata atataaaggt gttaggaggc ccttctaggc     1020
cattgaagcc actagaacag aagtcaagga attctcaatc ttcaaagcat gggaaatgag     1080
gggtacaggg attctcccta gcccagttag aaactccttc aggcaggacg taaaatttat     1140
atttctcttc tattcttctt cactactgtg ctagtcttat aagtctattg ttcattcatt     1200
caacaaatac ttattgagtg tgccaagaaa aaagcaaaga tctttgccct catagagttt     1260
actttctagg agggaaatag aaaataagca gaataaataa gagaaatata tggtgtacca     1320
gataatgatg tgtgctagga attaaaaaaa aaaaaaaaa a                         1361
```

<210> 1647
<211> 1043
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (927)

952

<223> n equals a,t,g, or c

<400> 1647
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gaattcggca cgagtttcca tatgttccct agctatttgc actttatgtt ctgtggaacg      60
tctcgtggct gccactgctg ccctaagaaa ggcctggctg caaggctggg aactcggctg     120
ggaaacagtt ccctgactga tataaacctt ccctaatgac gaaggtggtt tgcggttcct     180
aatctttaca aacaatgtgg tgtatgctgg acatcacttt cctcctaggg ctctggaatt     240
ttggtatatg ccaggcagag ggtatcaatg tgaccacccc ccagtaaaaa cctcaggcaa     300
tgagtccota atgaacttct cagatagaca acacttcaca aatgtcatta caacttatgc     360
agaagttaag cacatcctac aggactcccc tgggagacgg ctcctggtgc ctgagccctg     420
tttcctctga ctcctgggag acggctcctg gtgcctgagc cctgtttcct ctgactcccc     480
tgggagacgg ctcctggtgc ctgagcccyg tttcctctga ctccctgggg agacggctcc     540
tggtgcctga gccccgtttc ctctgactcc tgggagaygg ctcctggtgc ctgagccccg     600
tttcctctga ctcctgggag acggctcctg gtgcctgagc ccgtttcct gggtgcctga     660
ggccccatgt gccttttccc tttgctgaca ttgctgtgka ttattcactg taatgagtct     720
tagccagagt gtgactgtgt gctgagtcct gtaacactga atcacctcag gatgatcttg     780
gggacccttc acacatgcct ggtccagtct tttgctttct ttttttgaga cagggtctca     840
ttctgtctgg ctagagtgta gtggtgtgat cacagctgac tgcagcctca acatcctagg     900
ctcaagtgag cctcccaact cagcctncct gagtagccag gaacacaggc acaggccacc     960
acaccccagc taatgtttaa aatgtttcat ggagacagga tctcgctatg ttgtccaggc    1020
tggtcttgaa ctcctggcct cga                                             1043
```

<210> 1648
<211> 1113
<212> DNA
<213> Homo sapiens

<400> 1648
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ggcacgagct gctcttaacc taaaactaaa tacacaaat gtggcgtcaa aaaacccttt      60
acttcacttt cctattaaat gtctcgttta gcctgtactt ttccttttcg ctttggtact     120
tttttacacc atgcccccac ccccatcccc ccaccccta tctcgcgctt cccaacgcca     180
ccaagattgt cttgataaga actccaggtt ctcccacgaa ccgttctgat actattaatt     240
aaaagcagtg gcctcaggca gagggctcag gaagtaggga gggcgcgggc ccgcgcgcac     300
aacttcaggg aaaaggtctt tatgatttca gcatccagag accctatttc tgaggacaac     360
tccgcaccca tgtcctggta catgaaacca tcaccaaacg cgaacgggaa gtgtcctctt     420
cctgcctagg tgctgctggg gcgctgccac tcctgctgac cgggttcaga acccgatttt     480
tcgcaaccgc ggtggcaccc acgccggagt ccttacctcc ccgcgcgggc tcaatcagtg     540
gggattaccg cccacccta ccccagttta cacgcaggaa ggggggaaaa agggaagaaa     600
attaaaagct catgcagttc tcctcccatt cttttctaga tttgggcaca gctcggtgac     660
accttcaaag ccactcgtat agaaaggacc gcgggcggga cgcggccacc ggggctcagg     720
ttaaatttaa tctatagctg agctactcgc tcctccaact cacccagtgg accagtgttt     780
gacccagggg gcgaaacaac ggataaagca gcctccgcca gaatttcaaa aactccctgg     840
aggccactga atgtttatg catcagaagg gaagtctggg attccggtca ctgtggctag     900
gagggggag ggctcggcca gcagggtgag ggtgggggcg gaggcggttt cagccttaag     960
ccatccaggc ctcgggttta tggcccgggg ctgcttctgg ccgcggctct ctaccttgtt    1020
gccccggcct ctttcaaaaa agcagaggtt ttttgctccc tggcgcagcc caaagcgagg    1080
gcacagattg tcggagctct aaagctgccg act                                 1113
```

<210> 1649
<211> 495
<212> DNA
<213> Homo sapiens

<400> 1649
```
ggcacgagct tgccttgtgg cactggcagc agcagccaac cacagtggca gatgcagatg      60
agaaatgtca atggggctac agggatgtgg agatgcaggg gctattggc ccctgggcag     120
aatgcaatct ggtggctggc tctcaaaatg gtactgtgct gtagctgctt agggctcggg     180
gagttcatga gacccagcat gagctccctg tctggagcag tgccattatg aggtctctag     240
gaagctcctc atgttagtct cagggcctgt gagggttgag gagcattccc attgatagga     300
ttgcaggagt cttcaatgga aatatggacc actggggtc tctcatcttt ctccacattg     360
agaaacctct ctgcgctccc agctaatcct ggctgaccac gatgcctggc ttcctgtcct     420
```

```
tccttggcct tggatgtttc ctgtcacttc tctgtttaat gcaaaaaaaa aaaaaaaaaa      480
aaaaaaaaaa aaaaa                                                        495


<210> 1650
<211> 1099
<212> DNA
<213> Homo sapiens


<400> 1650
gtccaaagaa tctctggctt ggagtaggca agtatgatac aaggcagaaa tgagcagtgg       60
gtctgaaaac tgaggtgatc acttgaattc ctatatgtga aatgctgtgc tccctgtcac      120
tttctctatt actgtttgcc aacagctcaa cgcttaaccc caagtcataa aatgagggct      180
tttttcaca acataatttg aggaaattat ctggggagta tggccccaga gaaaagctgt       240
tttatggcaa gaaagaggga aaatgccaga aacagaaaga cataggataa ataaaatggt      300
gtgcctaatc cagagatgtc tcaaaacaca caattgaaag gacgacatac ggtttcagaa      360
gaaatatctc tatggggggaa aaaaaagaag aagacttcac aaaatagtta ttatgattga      420
aagagagacc aaatttaggc tatgatcaag attcagaacc tccagagaaa acaaaaaata      480
tatataggaa acgcataacc caaacataaa ctagatcagt gtagcacaac tttaagcaat      540
agaaaagaga atctatttga ccttcatcat aaatcattcc cctctgagtg gcccaggggt      600
tgtgacattg ggtccttgga gaagaagata tgatttcagt atcctacatc accctgtact      660
aaataaaatg tatagagtca cagtaacatt aatggtgcac tgtgattttc aactttact       720
attagctaac gaacaaatgc agatgacttc attatggttg catatcagaa attaaaatgt      780
taacaacctt ggtcaggctt ggtggctcat gcctgtaatc ccaacacttt gggagggccg      840
aggcaggtgg atcacctgag gtcaggagtt cgagaccagc ctggccaaca tggtgaaacc      900
ccatctctac taaaaataca aaaattggcc gggcatggcg gtgggtgcct gtagtcccat      960
cttgtcagaa ggctgaggca cgagaatagc ttgaacccag gaggcagagg ttgtggtgag     1020
cagagatcgc accactgcac tccagcctgg gcgacagtgg gagactccgt ctcaaaaaaa     1080
aaaaaaaaaa aaaaaaaaa                                                   1099


<210> 1651
<211> 670
<212> DNA
<213> Homo sapiens


<400> 1651
ggcagagaaa aaatggcaga atcatgcctg tacacagcca cacacctgtg gagcgccttg       60
tgtacttgac tttgttcttt tctctgctga agaaatgcca tttaacaaat tcaattactt      120
cataagatca aacacagcca ttcatcctat cttccctccc ccaccaaagg aatgcattct      180
ctttgaaagc tccagtggaa ccaaggaaaa agtttacacc cttctaagac tacccccggc      240
ctactcagca aggtcaacac ctgggcctgg catgcagacc attcttcaat gtgactcagc      300
ttccccttcc agacctcctt gcccaagagg tcaagcccca ggccgacacc tcttctaaca      360
cacactgctt ttacatttcc attcggaaag gatgggcctt tacatgccca tcccctctgg      420
gagaaccatc ccataacgtc atgcagtgtg aaatgccaca tcatccttac gtcctgtctc      480
agctaccact tccctcaata gggctctcct ctctccccag ctggacgtaa gcattttcgc      540
cttttgaact acctcttccc cttgtgcgtg tctcttctcg tattctgcct actgcatttc      600
ttacacagtt atgtgtatac tcgtcttatc cttgatcctt gtctcccacc ctctatcaga      660
gtacaggctc                                                             670


<210> 1652
<211> 1360
<212> DNA
<213> Homo sapiens


<400> 1652
gctcgtgccg ccagtgctta cacatagacg gtgcattctc tggaattcac cctgggtcag       60
agccttctca cctcccagca caagccagta gttaagcctc agtgtcccag ttcggtgcac      120
tgggcaggag atgggtctcc caagaccact cagccatgtg gttccttcag ctctcagcac      180
agccgagtcc aggctgcagg ctctccmtcr caagccaact acagagtgac acatgttctc      240
tacacatgcc gtgactgawt atgttgtgtt ctgaaaatat ttgggagtta atttgtgttt      300
tgtgcctagt gcttcmygga ccggtgctca ttgcatcctt acagccatct acaagggtgt      360
caccattatt tgtattttat tagacttaga gaggtgaagt gacttgctca aaataatacg      420
```

```
gttagcaaat gactgaaccc cgacccaaca gggagaatgt gggaagaaat caacaaagct    480
tatttaacag gtatctgcca agggttggaa aaaataagat ttattgytgc tccactgagc    540
agaacacagc ccatcagagg ttactgcacc ttcaacgaca tgtgcttttg actgacccat    600
caaaacactg gtggcaagag cactaaataa gttgcctatc atacttaatc tttccaggat    660
tcaaagagga gtgtagagtg aaatgaccta taagactcct gagcctaaaa tataatctaa    720
tggactcagc tttaaagcgc tcattgagag gatggccaaa aaccagccgc cacagtgcga    780
agcacgattc ctccaccatc cgcagtccac tcgcacaaat accctcagtg aaacacttct    840
ttctctccac ccacttttga gtaggatgaa atggcacatt ccattttcaa agtgggcagc    900
ttgcacgtat cagcagtgcc aggaatttgg aaaacgataa cgtggaaccc acagtaactt    960
gctggctgaa tttactcacc caggtgaccc aggtcgatga gggcttcaga gccacgggga   1020
tttttaaatgc cgcttcaaag ccaacaagga gcagaaccag tgctgattcg tgtttatgat   1080
aatgacattt gaaaggctaa aaattacaaa gttgtttaca gagatggact tagaaaataa   1140
ttgtatctaa tgtctcataa acataaaaga aagttatttt gtggtagatg attgaaaaga   1200
aaaaatctcc tttaaaaagg aaataaatat actagtttya gacagaaaca acttcaaagg   1260
caatcagaaa attcagtgga attttaaaga gggartctca ctcaaagaat tctctaaaat   1320
tgcctaaact taaaagcatt attttttctcg aggggggccgg                         1360


<210> 1653
<211> 840
<212> DNA
<213> Homo sapiens


<400> 1653

ggcacgaggc acgtgtttgc ctgtgttcat gtttgcctga gtgcatgtgt gtttgcctgt     60
gtgcctgttt gcctgcgtgc gtatgtacac gtttgcctgt gtgcacgtct gcacgtgtgt    120
ttgcctgtgt gcatatttgt ctgtgtgtgt gcacatctgc atgtacatgg gtcctgtcat    180
tgctgcccgt ctcctcccga gagctttctc tgcacgttgg ccctgccttt gcagcttctg    240
ccagccccgt ggcgccgagt ggccttcttc ccagccccag tgggcgcagt ggggtgggcc    300
gtcctctgag ggcacccgag ctgctgcatc tcccgtcttc ccgcatgcag tcctcagggc    360
acctgtccat gagccccatt cacaggagca gtccccaagg cacctgtccc acctgggcca    420
cccttggccc tgcgtccgta gccagagctt ggagggcttt gtccaccagg cctgggaccc    480
tgggatcctt cctcagagtc ccccggcgtg ggggcagtgt ggagggtggc gcgggtggag    540
ggtggcccgg gtggcggggt gaattcctgg ggagagcctg ccccctggcg gccacctggg    600
agaatgcagg gaacatggct gagcagcgtc ggctgtggag ggagggcagg ggcaggggtc    660
agggctgcag gcgtgtccct ggggctgata gcggtgggat ggggtctggc cagtggaggg    720
tccatggggt ctcctagcaa acgcagtggc gctccttaaa tgacggtgcc aggcggggct    780
gttctccttg gttggcctct gtgtcccttc aggctcccaa ggcccctcct cacatcctcc    840


<210> 1654
<211> 1590
<212> DNA
<213> Homo sapiens


<400> 1654
gatttttgtt tgtttgtctc ttttgaccac ctctataact cttatggata ttcatcaaat     60
tctgtatcaa agaatttaag atttagtcag taaaatatag ctatgatatg acacagcacg    120
attctgtgta aagccagcaa actaaccagc agcctcagaa attttatggt tcttctatt     180
gacagtctaa ggtcctccct ggttaccatt tccccaaaag aacaatgagg aatttggagg    240
ttatgcattc tcgcagtctg gggatctgtg atagtcactc tgttaggtgt ttttgagcca    300
ccaggttcct catagcagct ttcaaatctt tgttcctcgg gctgtagatg atggggttga    360
gaatgggggt caccactcca tagaaaatgg agatgagttt gtctgcaagg tcctgtttgt    420
ctgctcccat tgggtcctta gacttgggct tcccatacat gaagaggatc atcccataga    480
agacgatcac gacagtgagg tgggcagagc aggtggagaa ggcctttttc ctcccctcag    540
ctgaggggat tctcaggatg gtggcaatga tgaagacata tgagacaaaa ataaacagga    600
ctgggagtgc aaggaagatc atgttggtca caaccatgct gatcacgttg atgcagatgt    660
cagcacaggc caactttaga actgccagga tctcacaggt gaagtgattg atgacattgt    720
ccccacagaa gggcagtcac attgctaggg atatctgtac tacagagttg gtgataccag    780
ctgcccagga gccaacagcc atgggcatgt aggcagcctt gctcatgacc acagggtacc    840
taagggggtt gcacatgtcc aggtagtgat caaaagccat catgctcagg agaacacact    900
ctgtggctcc catggcaaag gagaggaaca tctgtactgc acaggctgag aaggagatgg    960
ttttcctggg ggtcaggaag ctgtcaagga tgaggaggtt gtatagcaga tgtccaggaa   1020
```

955

```
ggagaggttc cccaggaaga agtacatggg tgtgtgcagg cgggagtcaa ggatggtcac   1080
caggatgagg accccgttgc ccagcaggat caccaggtac accagcagga tgaacacaaa   1140
gaatgtcttc tccagctatg ggtgggcaga gaggcccagg agaacgaacc ccaacacagg   1200
ggaggcctca ttggacctgt tcatggtgca tctgctctgt cacctggagg aactcagagg   1260
tcaacctcag catcctctta ctccaaaagt acctggaagg ccaggcacaa atccttgccc   1320
tgctgagcaa ctggagaata gcgctgatga tttgttcatc tctatggggt tctaggaaca   1380
atgtagtaca ggtcaatatt taacttctgc ttctggtaag aacaaacagg ctaatttgga   1440
ctaactgtct tgcagatgac cattagacaa actggaaaaa atacataaaa cattggagaa   1500
gtaataagac aatgaggaac atagggttat gactctgggg aaaaacaagg acctagagat   1560
gtaagtctag cacttgtggc tgtgattcaa                                     1590
```

<210> 1655
<211> 177
<212> DNA
<213> Homo sapiens

<400> 1655
```
ggcacgagtg ggctgtgtac gtgtttgtgc catttttatg actgggaaaa tgacagtgat    60
gatgaggatt cctagttcta ttgttactaa taccgctatg gagtctgaag tgccaggttt   120
taaaacccag gtgtatcgct cattagctgt gtgaccttga gcaagatctt caacctc      177
```

<210> 1656
<211> 1014
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (930)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (949)
<223> n equals a,t,g, or c

<400> 1656
```
agggataacc tgtcatctac atttgaaaat taatgaacaa ttctcgttac atagataata    60
tttttcagtg acagtcgtat ttttttctgt gggagggtgc acatttatat tcatgaaatt   120
ttagtttcca gctttgaact ggcacccttg ttaaaaattc tgattttttt tttttttaa    180
actctgggga ttttacttaa caggttctga aaggcttgga ggctataaca ttctcacatt   240
ggaaattcct tactaggaat tacttagttt gaacttagaa tgatgatgaa cttttgggac   300
ttaaatatac tataactttt gtcactagga tcaggaatat tcagagtgtg aagtcaagtg   360
agtggtgtaa tcaaagagtc tgaaaagaac catgagacat catgtagcag tcttgccttt   420
aggcagtaat gtattaaagc tactttgctt attctttgaa aggaacatct ctagagaagt   480
tccaaagtca tccttggtga tatctttcaa tgatgcagaa atcttagtca agaaattagg   540
aagtcttccc taaatataca ttctgaatcc ttcctgatgt gatagtttat ttgccccttt   600
tcatgctctt actagcaata agagtaagcc gctcaaatgt cactcatctt ttcatatctc   660
tgaataatgt gtttcctttc ttttttaatt taaaggatgt tcactaaaca aagttttggg   720
gaacaccaga aaagtagaaa gaacaaaaaa gataataccc actggtattg cactatccaa   780
atatgtaatc actgctaaca attcctgtgc attttttaaa cttacaggcg cgagcactgc   840
gcctggccac attttcatat tactatggta tcctttctca aggactcatg gtaccctgtc   900
cacttttatc ttattaaagg gaaattgtgn taatataatg gacgtctgnt tttgcatgtt   960
gaagtggtca catatgcctg taatgtggtg ctagtgtttc tgtcccaaac agtg         1014
```

<210> 1657
<211> 1270
<212> DNA
<213> Homo sapiens

<220>
```

956

<221> SITE
<222> (155)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (752)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (767)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (835)
<223> n equals a,t,g, or c

<400> 1657

```
ggcacgagaa aaatcagaaa agaaaattaa aattccccac caatgataac agccattggt      60
atttttacat gcatccttct gagttttatt agtcccatgt atatataaag aaaagttgga     120
atgtacttta cagccagctt tatatgctgc tttttntctct agctcttata aatgcttatt     180
tataagcatt ttctcaacat aaattacttt tgaaggtttc atttgatggc cacgatatgc     240
catcacaatt attttttcagt cataatttat gtagctgatc ttcattgtta cacacatgga     300
tgttccccac catgtggctg ccataaatga ttctccgatg accaactcta cacatagatc     360
cttgtcttca tctctgatta tttccttatg atagatttct ggtctcatca ggtcaaagga     420
tatgggcatt tttaaggctt tgatatgtgt tatgaaattg ccctcctgca aaggtggcct     480
gggttccact ccccatgaag gctcaacagg tttctgaggc ctccctcaca cctccttcag     540
catcttctct ctcactttcc tgcctcagcc tcttctccct gggttccctt gtgaaacaca     600
atagtaaagg attatattat caaatattta attatgtatg tatctgaaaa tattttaaaa     660
gtcaacataa ttactctatt tccattagtt tgatttgcag caaattatgc atttagtgtg     720
aagttggagg tgcyttgctg gttggagygc anatagcgkt tggctgncta caatggggcg     780
ggcgctggtg acaacagctc aggctggtaa agccgtatca ggtccttgca gaggnagggc     840
ttcctcccag ctggggagcc tcagtacctt ggagctctga aatcacacca acaccacaaa     900
tgaccctggg gactgggtgt cttagttatc tattcttgca taacaaacaa ccccaaaact     960
tgtggttgct gaaaacaata aatatttact gtctcacagc ttctgtggga gctctccatc    1020
cgtggccagc agctcaggct caggatctcc caagaagctg caatcaaggt ggccccatgg    1080
ccgcagtcaa ctcaggcttg actcagggag aaagtatctg cctccaacct tactcacacg    1140
atctctccaa agggctgctt caggacgtga cagctggctt ctccctgagc agacaattcc    1200
agagaagcac tcaggtcggc acgcaaggtt ttcccatcct tttggcatag aagttagagc    1260
ccagctcgag                                                           1270
```

<210> 1658
<211> 1100
<212> DNA
<213> Homo sapiens

<400> 1658

```
ggcacgagat tacataaaaa caaacaattc tcccaccata ttttcagtac agctccgcta      60
atgaacatcc tcaaatcata ccagacactc tgtatttatt tttctgatgt acttccctat     120
aatctgtttc agattatttt tatttacaga aatgattttt tccaagattg ggaccaccaa     180
gaaactacag atgcagacat acgtcatatc actcctctag tcctgaattt ataatattat     240
ttaactcagt ttttcttttt acctgagaac aaataaacaa aaataacaaa caccatctcc     300
caccaaaata atacaaacag caatgaaaaa cttttctaag tagctgtgag tcaaaaaggt     360
gaaatttcat tgagctgcaa aactaatcca gcagtttttag gatatgttca cgttttggta     420
atttagatga ctatttctac atttccctat gatccaggat accaagggac ctgctgcctg     480
agacgttgag atttagaggg cttttttctct gttacaatga ctcagagcaa atggagagag     540
tgtccatttt tcatggatga tgatgcttgt aaattttcat tcatatcttt gataactgat     600
gtacttagca acttccagat aacattggtt agagttagct ctgcttattt tggttctaat     660
ttagaaggaa gacagagaaa atactcattc taagtaccta cttttttgtca gtaactatgg     720
```

957

```
tagctacttt atgcactttg tgtccatcag ggttttccag agaaacagaa ataataggat    780
acacacacaa acacacacac acacacacac acacaggttt cacatccata gattcaacta    840
acaggctcta aaaaattca aaaaaaaaa ttctacaaat ttccaaaagg caaaacttga    900
atttgtcatg tgctaaatat cacacaaag aaataacatg taggcatggt attcaattga    960
ataattaatc tggatgggtg tggtacttca cgcttataat cccagtactt atggagtcca   1020
ggcagaaggt ctgcctgagc ccaggagttt gagagcagcc tgggcaacag ggagagactg   1080
ggtctctgaa aaaaaaaaa                                                 1100


<210> 1659
<211> 1473
<212> DNA
<213> Homo sapiens


<400> 1659
gccacgaggg gaggttggct cttccgggcc atcccggcct ctgtggagca tggccgggtc     60
tatgtgggca atgttgcctg gatgcacgtg ctggcagccc gggagctgga gcagcgggca    120
gccctgatgg gcggccaggt atacttctgc tacgatggat cacccctacag gagctacgag    180
gatttcaaca tggagttcct gggcccctgc ggactgcggc tggtgggcgc cgcccattg    240
ctgccctact ggctgctggt gttcctggct gccctcaatg ccctgctgca gtggctgctg    300
cggccactgg tgctctacgc acccctgctg aacccctaca cgctggccgt ggccaacacc    360
accttcaccg tcagcaccga caaggctcag cgccatttcg gctatgagcc cctgttctcg    420
tgggaggata gccggacccg caccattctc tgggtacagg ccgctacggg ttcagcccag    480
tgacggtggg gctggggcct ggaggcccag atacagcaca tccacccagg tcccgagccc    540
tcacaccctg gacgggaagg gacagctgca ttccagagca ggaggcaggg ctctggggcc    600
agaatggctg tccttgtcgt agagccctcc acattttctt tttctttttt gagacagggt    660
cttgctctgt cacccagact ggagtgcagt ggtgtgatca tagctcactg caccctcaac    720
ctcctgggtt caagcaatcc tcctgcctca gcctcctgaa cagctgggac cacaggtgca    780
cgccaccaca cctggctttt tttttgttgt ttttagagac agggtctcac tatattgctc    840
aggctggtct tgaactcctg ggctcaagtg atcttcccac gtgggcctcc caaaacgctg    900
gaactacaag tgtgagccac cgcgcctggc ccaagccctc cacattttca atccaggagc    960
cttgagtctg tgttgtgtcc tgacacctcc aagttctagg gccgtcagga cacgggaggg   1020
tttggggaca gagtgtcctt cctctgtcct ctcatcccag tcctgatggc cgcttggtga   1080
gtgtctggtg ccctggtggc ctgccccagc tctcttctgg ctttctgagc aggaagcgag   1140
cagaggctcc acaggcttac gctgctctcc tgacagccac acgcgaccct cggtgcagag   1200
tgcagaggcg gctctggttc ctccagccac ctcagtccct ctttgggagg tgatgttccc   1260
attgttttc aaaggcctca ccttcaactg tctgtcttag aattcccctc tggagggcta   1320
tggcctccct atgctttcac ttcccacctc tctacctaag ttccttccca gcacatcgcc   1380
agccctgggc ctggggatgt ccccaatgct gtacctggct gaccccggat taaaagcctc   1440
atccacgacc gtgaaaaaaa aaaaaaaaaa aaa                                 1473


<210> 1660
<211> 1291
<212> DNA
<213> Homo sapiens


<400> 1660
ttcggcacga gctcaaacac attacgtgga atgaggggggg agtgtatgaa ggaatcatta     60
gcaacagatt agagtcccca ccaaagaaaa agaaacaaga ctcaagggct ttttgagctg    120
ccacctctcc ccagagaggg ctcagaaaaa agatggcctg gactctgctg ggcagggtgg    180
tgggtcatca cccatgaatc aaggacatga actaacctat atacacctat gccagcattg    240
cagctttggc atttctgggt atgagggatg caggagcagc aagcttgatg caagggggact    300
taggaacggg cctctaaaca aagcttctct ggtaagcaca ggatcttccc ttaaattacg    360
tgcctattaa ggggtttagg atgccccgcc caagctgtgg cttggttctt cttctataca    420
cacacataca ttcttaaatt ctcacatatt tatagccctc acatataaac acagtgtctg    480
aaacacaaca taagcctttg caaaaatatg cactagatag ggaaggcctg gaggatgccc    540
aggcatgaaa gtgtccactt ctcagaggaa catggctttg ggtcactgtc atttgcacct    600
gcactgcatt ttcctttctc tcatctacat gcagaatgct tcatattcaa gggaggtgcc    660
acacccagtc agctgagctg tttacacgta gtgggctagc ttgctcatgc ttacctgctg    720
tgtcttctgt tcatcagttc tttctacttt gttttacagt ccattcgtgg aactctagct    780
ttcaattatt gtttcataaa tacaggcagg taggacaaaa atgtggctga atcattgcaa    840
aatcaaaata ttttctggga gaaaaaaatc atagcacttc ttctactgac aagtcagaaa    900
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958

```
cttcatgctc tcatctatgt gcccatctgt gcatattcct ccattttgta cctgtccatg        960
cattcttctt acctctgaca ggaaatttcc acattctact cttgaatcct ccttaattta       1020
gtacctgcag aatgtgccta acagatgctt gataccctaa attacagtca gataaggcag       1080
gatgttaggg gtccatgatt ctttggggag attttttgca agtacatctt ccttcctaca       1140
aaaggtaaaa aaaaaaaaaa gcacccacag cgttcaagtt gaaataactc cagcccaatt       1200
tttatgactc cttctctgta cttccaatac tcccttccta caaaaaaaaa aaaaaaaaa        1260
aaaaaaactc gagggggggc ccggtaccca a                                      1291


<210> 1661
<211> 582
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (297)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (335)
<223> n equals a,t,g, or c


<400> 1661
ggcacgaggc ggcggtggct gcggcggggc gcccgggtgc tcggtggcct ccgagtactt         60
ggtgaaaacc agcggcacag cgatgtccgc tttgtccaac tggttccaga agcgggcgat        120
gcagcaggcc ctcgtgatgc acggccacgc catgatgcta gctgaaaagc cggcctcctc        180
tttcttcttg tggttctaaa gcaagtctct ataatcttcc ttcagcctcc gatcctgacg        240
gccaatgtgg ttcccaccgt tttctacccc cgatcagccg gagctagttc gccctcntcc        300
ctcagcgagc acccggggag actgtcctag gagantctgt agagtccctc gattaccggt        360
cgcaaacgcc tttgggagcg cagtgtgmtg cgagcgccga agggtgagac gcacggcgtt        420
cccgagtccc cggcgagggt gtctgggacg cgcccctccc tacggctgcg cggcgcaca        480
gacctcggtc gagcgaggcg acgtgaggag aggtggctac aggcttaagc catggcgcag        540
aggaggggcc gggcggtgtg gccgcagggt ccgcggaccg gg                          582


<210> 1662
<211> 1219
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (888)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (889)
<223> n equals a,t,g, or c


<400> 1662
ggcacgagca tgaagatgca aaactatgag ctgatttcat attttaaatg caagttagca         60
aaatttacct tctacaatta tttgacaaga atttaaagtg caattgacaa acctttcaga        120
aaaaagctgg gaattgggcc tttggggtaa ggttgccata tttagctaat taaacataca        180
agtttcccag ttaaatttga atttcagata aatgatgtac aatatttggg acacacttat        240
acaaaaaatg ctcattgttt atctgaaatt ccaatttaac tgtgcatctg tattttgcct        300
gggcatccta ctttgggta cttcgaggtc cctggctagc tcctggtcta tgtcttagtc        360
catgctcaga agtcccatgt attcaaccag ctgcttcttc ctccattcca gtggttcttt        420
tacaggtagg tgaggtctta aagaatcttt tgaaactttt gagccattcc ccaggagaat        480
atctacatac aaaatttggc atctccaggg tatgtgggtc ccacgtgagc cccaccccac        540
aatggtcgga cccaaggact cctcccacag tccatggcac tgtgcagatg gccagctacg        600
```

959

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aggaagtgag catgttggac tttgaggagt tcaaccagac tatgaaacag caaaatcaca     660
agacctttt  tgccttcttt gccagttcca aggacattgg aggtaacaga tatagcccca     720
atggcatgcg ggccaaacca gttgtagaga cgggctgaag catgttcggg aagaatgtgc     780
attcatctac tgccaagtag gagaaaagcc ttattggaaa gatccaaata atgtcttcag     840
gaaaaatttg aaaggagctg cagtgcttaa ccatggaacc caggaaannc tgatagaatc     900
tgagtgtctt caggccagca taatggaaat gttctctgaa gattaagatt tgatgatggc     960
agtcatgcct tgatttcctg ctctgttctg gtaaactgca tacttggttt gaattcttgt    1020
tagcaataaa taaataaatg atgatgggct gggcacagtg gctcccgcct gtaatcccag    1080
cactttggga ggtcaaggcg ggaggatcac ttgagcccag gaggtcgaga acagcctggg    1140
caatgtggtg aaaccttgcc tctacaaaaa tatttaaaaa ttagccaagc gtggtggtgc    1200
atgcctatag tcccagcta                                                 1219

<210> 1663
<211> 1543
<212> DNA
<213> Homo sapiens

<400> 1663
ggcacgagtg taactgtata atattgacaa tcgaacaaac agcttcaatc atgtctattc      60
atatctccag gcaaagtttt gttcttcttc ctttatttta caaatgtatt gcttcaaagg     120
acacatactt ttgtggataa acaatttcca ctagaagaag aacaggaaag gtagctattt     180
aatatatgca gttagagcca tgaggtatgg atcatagtaa ataatatttt gcaatgatac     240
tagcactaat aaagatgatg acatttgcat gattagctat gttttagta aaggaaaatt      300
aatggatagg aatatttagc ttgaaggata catacaacat gctgacaaac aaaactgagt     360
ttcagcataa aaatggatat attacacaga gagtatacat aggctcctaa tgtctctgtg     420
tgcatttgta tgcatattat tcatctagta ttttctttt acttccaagt tggaatgcat       480
ttacttcata tcttattata agcccatttg gtaacacttc tgtcagattt cagttgcata     540
ttcactgttg aataaatcag tggttaataa atgtccttgg aaatgtgttt agagataaat     600
aatgaactgc tgtatctgat cattaagtgt acatcaagct cacattttta ctctcagaat     660
cctaaaagga agatagcatg acctactata tatgtacatg gaaaaaaggg aaataattat     720
agagaaaaca tgtaaaagga gcctggttta ttactcttaa atgggtacat gatagatcaa     780
aataaatgtt attacaactg atcaaaaaat cctactgcaa aggaaataat aaataaagat     840
ggagagtcaa cctgtccatc ataagtgctt tttgttacaa agccaaggac ttggagtgtg     900
gacccaaccc cacagcatgc aaaaccgtgg ggctctcagg attccaagcc tagcatcccc     960
accctctcat aggcgcttcg gagctgaccg caggcacact tttaatttgt ggcaagatgg    1020
tctgacaaac agcttgggag gacagcacag gtgaaaatac agatcaagtg cagataaaaa    1080
tatgttcacc ttgaaaaata caaacaagac ttttaggtaa taatgcacag ggaaatccta    1140
tcaaaaaatg agaagaatag aaccactgct ttctcattaa caattttcac aatcccttt     1200
agcttgtatt ccaacttctg tccataatcc aatatctgca tactccttac atctatactt    1260
aaataatata gatttttgtc ccctgtacat atcttataaa tgtcaatcca tcccacctca    1320
aagtttcttg gtattcagca agttttttaa aaagtcaatc atgtaggaga tcctttagca    1380
atacttcaag gtatcatccc tataaaaagt gaagagggat ctgaggtcct aaaaagaaaa    1440
ataatgacag agaatggctg taatttcata tgttcctgat ggaaatctca ctgctcagaa    1500
aaaaaaaaga acacatatgc caaaataaaa aaaaaaaaaa aga                       1543

<210> 1664
<211> 817
<212> DNA
<213> Homo sapiens

<400> 1664
gcttctaggc ctgcggaatg cacctctgct gggctggggc tctgagtttt gtgttttggg      60
ccaacctgat cctcatatat ctatttggaa ccagcgagtc tccccagaat attttatcaa     120
gttattttga gttaggagtt taatagacat agaagccttt aaggagagtg agtaaatgaa     180
gttggcaagg ggagtaggca ggggagagag gaggaaatcc caggctaagt tttggaagag     240
ggcttgatta tgttggtgac agcaggctgc atcttccagg acaggaatcc ccccgtggtt     300
tacaaaacac ttccccttac ataatcctat ttaattcaca cgacaagccc aagagttagg     360
garggttcat tgccttatta gcctgtgttt acagatggtg aaactgaggc tcagagaggt     420
gctgagatca cacagcagga tcatgcagca gaccacgggc agggctggga ttccggacca     480
agcttggcat tcttttcctg gcaccacagt attccctgca agccctctgt gtttttccact    540
cctgagttag atgtcactgg tggtgctgta gagggggctg ctggagcact gtccttcatg     600
```

960

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tgaaaggggg ttcccttttgc cctttttggg tgcccacccca caagcttctc tgtgctctgc    660
ttcccttcgc tctccaagat gctaccttag agctactgga gccactttgt tcaggcagag    720
ggctgtacgt gccctagggc tgatgtgccc ctggaaaggt ttgcagctaa ggactgcctg    780
gagcagggat atgaaagccc agctttcttg gctcgag                             817


<210> 1665
<211> 829
<212> DNA
<213> Homo sapiens

<400> 1665
ggcacgagaa ggcaggggcc ttgaatgaac aaacgaacct gactaggggc tacatgaaag     60
ccatactgtg cttcctcctc cttctcatga atccctttcc tcccttctct tttccatccc    120
ccatagatca gaaatgtgaa ggcggttagg aaatgtccag actccaaaca gaaaaaactg    180
tgatcctcag cagacacaag acataatatt ggattatttc cagcttcatc ctgggaaaaa    240
tataggagac tgaagggaaa caggaaaata agtaaacacc catagaaaaa taaaatgtaa    300
gataaaaact gaaatgtaag aactatcaca tggtgagtgt ctatattcac tcataataga    360
gtaactacaa aatcataagt ttgatattta atcctaatgg gggtgaataa ttttttaaa    420
tgttgctact gtcgtgataa aacaaattag ctacatactg acaaagtaaa agcgtgtttt    480
ctaaaattga aataattctc aaaataacag tttagaaagg ctgcacattt tacaggaaat    540
gggttgaaca tcacatgatt tactcattaa ggagataatt attgagcgcc taaatgagga    600
aaaaagattt atagatttta aacaagcatc caattaacta aatattactg agtaaaagaa    660
aaacaagtta atgatacttt tgtaccaatt ttattataaa atgtacgtga agaaaggcta    720
ttttgtcaaa ctgttttccc gtatcatgtc atatttata tttacagcaa catcctgaaa    780
taggaatttc tgaggatatg cttcccattt gagagatgaa aacctcgag                829


<210> 1666
<211> 783
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (743)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (752)
<223> n equals a,t,g, or c

<400> 1666
aaaacttgga gctccaccgc ggtggccggc tgctctagaa ctagtggatc ccccgggctg     60
caggaattcg gcacgaggag gcaccgcaaa gatgcaagaa gtcacccgga gtacaaggac    120
aggacgccag gctttcaggg ggacgttgag gcagtcaaag gaaaaaaatg gcaaggcaga    180
agaggaggct gtggtactcc accggaggcc agtgccttcc atgcatcccc tgccccgggc    240
ctggggggttg gtcgttgggt ccctggcttt cacccagggt gcgtgtctct ctcatggggg    300
gcagcccaaa gtgggaagaa gtcccctggg ggattgggat aagatgccaa gctttcagag    360
aaacgttgag gcatctcgga aaaaaaaagc agtgaggcca gaggagtctg gggtcctcca    420
ccagaggcca gtgccttctg ggcagcccct gcgttgggcc ttgggtggtt gtggagtccc    480
tggctttcac caagggtgcg tgtgtctccc acgggggca tccaaaaggg gcaagaagtc    540
cactggggga tggggacaag atgtcaggct ttcaggggga cattgtggca gcccaaggaa    600
aaaagtgacg aggctgaara ggaarctcgg atcttccgyt graggccagt gccttccggg    660
cagcctttgc gccaaktcra ggggggcccg yacccaattc gccctaaagg gagcggatta    720
caatttaatt ggccgccgtt ttnaaaacgt cnggacttgg aaaaacccct ggggttaccc    780
aaa                                                                 783


<210> 1667
<211> 578
<212> DNA
<213> Homo sapiens
```

961

<400> 1667

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ggcacgagct cataacaaag gccagaactg ttagaaacac acatacctcc ccacacaccc      60
aaaacctgaa catgtcatct tcctacttac aacccttcca tggcttccta ctgtggttgg     120
attaagacca agacccttgc gtggcttata aggtctgcag gttttggctc tgccaacctg     180
tctagcctcc tggccctctc aatcagcttg ctgtttccct catttgttac acaagtttca     240
ttttttaaaaa tgcatcatgg gctgtttcct cctcctggaa cattcttccc tcccttttccc     300
ctgacctgtc aatttctatt atccttcatt tccctgctta aatgtcactg ttttttgagga     360
agccttcaaa tccccagatt aggtcagaat cccctaacac actcactctt ttcgcacccc     420
atacttaatt tttgtattat ttttctccaa gtgaacttaa ataaccatat aactgattaa     480
aattgttctc ccctgccaga acaagaccca tgaggacagg agaccctttt gtcatggctt     540
ctgtagcacc cggcatagtg cttggaatag aggagaca                            578
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<210> 1668
<211> 1142
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (954)
<223> n equals a,t,g, or c

<400> 1668

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ggcacgagca tagatatcat tccaattttt cctgttgcaa gtaacagaaa accagacccc      60
atctggctga agccartaag agaaaagact aacaggaggg ccagcctcag gactcaaata     120
cgtcaccagg acatgggttg cgtcccagtc tcagctctgc cagttcctgt agaaccctcc     180
ttccaaggtt cacagggtgg ctaccatagc ttcaggccct cacctcatga taagacagca     240
atacaackgc catttcatgt ctgttgctgt ttctacattc agttagaatt aaataaattt     300
tccagtagca cccacaaaaa tactgagtcc acctggttgg cctacctaga tatatcgcca     360
gccctgatca agtcactggt cacgggcctg gattttctgg ttcgcttagg ctaatcatac     420
gtcccatccc aggactgaag aagtaccagg gctgttgctg gagagtggct aatgtcccct     480
ttacaaataa ggagctcatt gtttaggaag atgagcttgc caaaaatcac acacttgtaa     540
aataagtcaa aatttgaact taagtctact tatctgagcc caaagtctta caaccattta     600
tggctgttat cctaacacct acgtcgcgga acggaagagt cctaagactg caaagaccct     660
tccttttctt ctagatccag tctaagttgg ttggtaattt ctttagaccc tgctttcagg     720
gaagtttaaa aaaaattact tgcatttgta tattttcctt gtattttcgg ccaaatttct     780
tctaattaaa gtacaacata agttgaacca acacaataat tgtcatatta agaaaagata     840
aaacaaactt tactcatttc tgcttctggg catggagtgt gagggaccag acttaagttc     900
tcaaacaact acaaaatcag accaaaaaat acaatggttt ccaggcaccg gacnacaggc     960
agtgcagggc tgtgatcctt aagagaaggg aagcagcgag ccagagtatc caggccacaa    1020
cccaaatgga ggccaagaga ggaacagcag aggatacaga gggagggttc caggggccaa    1080
gacgcaatcc gaggggaagc ccttccgggg agagctggag tcctggggtg gccttctcga    1140
gg                                                                  1142
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<210> 1669
<211> 2478
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (591)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (599)
<223> n equals a,t,g, or c

<220>

<220>
<221> SITE
<222> (1252)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1272)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1275)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1402)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1480)
<223> n equals a,t,g, or c

<400> 1669

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ggcacgagtg acctttcaaa agttgatgaa taataaaaaa caattcatat gttctctctg      60
tctcttatac tgtactttgt ttcacaaata tttccacagt tttcctggct caatcatttt     120
aattgcaaag gcaagattta tatatcataa attattacat taagcagtag aaatcagaaa     180
tactgaggtg ggaaatatga actatccttg cataggaaca gctggaataa cctggtccaa     240
aaatgtaata ataaaaacaa caaccaaaca tactgctcta ctgataattc agattttttt     300
aagaaatcta atttttaaga aaaatcttgt tcaacttgcc agaagacaaa aatgatttga     360
aggttttaaa aagtgttcgg ttcattactg gatttgagct ggactcaatg tatctctact     420
attattgtta aagcagaatt atgtttacca caaaactaaa cagtttgcat gaccaataat     480
gatttttaaa aaatgtttag ctatgaaact cttatgtggt tgtctcttga tatctagaga     540
aagagaaggg aaaaaattat atttatcaat gttgagacat tagtttcatt ntacctaana     600
aaaatttaaa agaaaaacag ttacatagga attgttaagg agtttgtaga acactcactc     660
ccttcatatg cattgtagtt gggtatcact taaacatctc aactaagctg gatttctact     720
acagcggtct cctaagtcaa tcaggaaaat gttagttttt ttggttgctt taaatgaatg     780
aatttctcct agcaaataga agcaatatga ttttaataaa cagtgatgaa gactctggga     840
aacccttaca atgtagggta ataacatctt tctattaaaa acaataatgt tataaacatt     900
tcaacatcca aatgatggga catttcacat actcatgcct tttgattatt ttcaaagatg     960
cttcattacc taactcattc ttgtcacaga attcttgtag ctaaaagcaa aaatagactc    1020
aaattgaaag atttttaaaa gataactact tggcagcaat tataggtgta tatacccttg    1080
aagatacaaa gacttaataa taacacctga agaatatttc cctgcccct yccacacaca    1140
cacacacaca cacacacaca cacacacaca aatactaggg aagtgtgctc ctcctcagat    1200
cctccagctg tgggcttcct aattaaaagg ctgasctgtt tcctgctcaa ancmcttcaa    1260
aagccttttt gntgntctcc acttgcatat agttcgcagc acttgtcctt cttacctgtc    1320
cattcttatt tatagagagc tttcttgaat cagaaaccca agaagtgatg cagagmccat    1380
tttattttat aaagttgaag gncaataata tttatgttaa aaaaaaatcc aagtagctga    1440
attagcaact cagtaatttt gctagactgg caaaaaggan caatgcatgt ggcatagttt    1500
ttaaaacata aattttata gcataattta aaaacagtat ttattactgg ctgattttta    1560
aaataaatgg gtattttcac ttgctgtaaa tgtgacatgt taaaatctat ttttaaaaaa    1620
atactgagtt tgatattcat gtttaaagtt ggagactgtt gtaaaagtct gcctctgaat    1680
ttgatatctt agacaaggaa tatttacctt ggtacaaatc aaatggatga gagatctaaa    1740
cataaaatag tcaacagaat cgtcttttgt ggattcaaaa tagaaacggt wcaagtrgca    1800
aacactgaca aatwgccctt tttaaaagcc caatctwaaa atcgacgtcc acaaaagctt    1860
tcttttccaa gtatttgcct ataaagttat ttcaacacgg ctctgacaaa tgcctgtgtg    1920
tcctgtccca tagggaaagg tgtgaacgca taacgttttg ctctttgcaa aaaagggtcg    1980
ttaattgkcc gagagcascc accgtttagg gatgaaggga gattaagtga ttttttggcca    2040
atgcatctgc caattccctt cagggtagtc aagaatgggg gccggcagcc mtgctgcagt    2100
tggaaggtct gtccaaaaaa ggccgttttg gagaaagagg gagagactgc gagtggccga    2160
```

963

```
ctgcgccccc ctcccagccc tccggcccgg gcgcctgagc cgccgctcac ctcggtgtca    2220
ttgttraggt tccagaggtc caagcgcccc atcccgtcca cgcaggcaaa aarcscarga    2280
tgcacggggg accacatgac atcgtacaca tagtctgcat tgtcttcaaa ggagtagagc    2340
ggcttgttgt gctgtaaagc agagagaccg tgaagacttt gtggcgctgc tgctgcctcg    2400
ggctgtctag agagcctaat taaaaacttt gcacattcac aaagtgtcat aaaacttccc    2460
gagatgaaag tcctcgag                                                  2478
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<210> 1670
<211> 1092
<212> DNA
<213> Homo sapiens

<400> 1670
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ctgcaggaat tcggcacgag gttcatttca cttttcagaa aggagctggc tatcaccttg      60
atttgctcat ggttggcgtt atgttgggag tttgctctgt catgggactt ccatggtttg     120
tggctgcaac agtgttgtca ataagtcatg tcaacagctt aaaagttgaa tctgaatgtt     180
ctgctccagg ggaacaaccc aagtttttgg gaattcgtga acagcgggtt acaggctaa      240
tgattttat tctaatgggc ctctctgtgt tcatgacttc agtcctaaag gtaaaatttc      300
tttattgccg tgttttacaa tcttattata acatttatac ttagttatgt gaacatgaaa     360
cattaaaata tacttaaaat acctaaaatt aggtttgttt tccacagttt actttggaaa     420
taatttcatt aggttttag tatagcaagc atttcagtgg taagctgtat atattttaa       480
aataatgtat accaggtgta gtggcttacg ccwgtaatcc cagcamttcg ggaggctgwk     540
gcgggyagak cacttgcgsc cataagttcg agaccaacct ggctaacata gcgaaaccat      600
catctctacc aaaaacacaa aaattagctg ggcatggtgg cacgtgcctg tagtcccagc     660
tactcgggag gctgaggcca agaatcattt gaacccagga ggcagaggtt gcagtgagcc     720
aagatcatgt cactgcactc cagcctgggt gatggagtga gactctgtct caaaagaaaa     780
aagaaaaaaa aatgctagga aaaagaaata agaatgggaa aagctcatga aaattaaatc     840
tataaatatc aaaataacta aaattttgta gtaataattt tcataagact gaagaccaat     900
ataatgatat gaaaaaagga gaaaattttc tttaatagca aggggaggag gggataagaa     960
tattagaaca aatccaaaag gtctgagatc tgtttagctg gagttgaaga aatttgtaac    1020
agagacaaca gacgaaaagg gaagtaaaca ggggaagaaa attctcacag cagaaggcac    1080
aggtttctcg ag                                                       1092
```

<210> 1671
<211> 846
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (823)
<223> n equals a,t,g, or c

<400> 1671
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gatcactata aaaaaagcag gnacgcctgc aggtaccggt ccggaattcc cgggtcgacc      60
cacgcgtccg acggctgcga gaagacgaca gaagggtacg gctgcgagaa gacgacagaa     120
gggggagacc ggaagtgagt gatcgaaagc atggcgtcgg tggtgttggc gctgaggacc     180
cggacagccg ttacatcctt gctaagcccc actccggcta cagctcttgc tgtcagatac     240
gcatccaaga agtcgggtgg tagctccaaa aacctcggtg gaaagtcatc aggcagacgc     300
caaggcatta agaaaatgga aggtcactat gttcatgctg ggaacatcat tgcaacacag     360
cgccattcc gctggcaccc aggtgcccat gtgggtgttg ggaagaataa atgtctgtat     420
gccctggaag agggggatagt ccgctacact aaggaggtct acgtgcctca tcccagaaac     480
acggaggctg tggatctgat caccaggctg cccaagggtg ctgtgctcta caagactttt     540
gtccacgtgg ttcctgccaa gcctgagggc accttcaaac tggtagctat gctttgatgt     600
cctgttgagg ccatcggaca gagactggag cccaggtgac aggagatggt gataccagaa     660
gtcaagggtt ggggtggcga cacggcctcc cgaggaagag gtctgcttga tggtgactct     720
```

964

```
gcaggagact ctgaagtgac tgctgggaaa ccctttggga gacctgacct ggggccaaaa      780
ataaagtgag ccagcgtcat gaacgcatgc tatttaggga canaaaaaaa aaaaaaaaaa      840
actcga                                                                  846


<210> 1672
<211> 630
<212> DNA
<213> Homo sapiens

<400> 1672
ggggctgcat ttcatctgga ggctctactg gggaaaactc cccttgcaaa ctcactcagg       60
ctgttggcag aattcatctc tttgtggctg catggctcag ggccacagtt ttttttgctg      120
gctggtggct gaaagctacc tgaatttcct gactctgtgg ctttttttaa tgtgcccagt      180
agcttcttca gtgaggagaa tttctctagt tcatgccagc aagacagtgt catgtatata      240
catgtatgtg tgtctgtaca tgggtatgtg tgcctgtgtg tgtgtgtggt atcctagtca      300
cctttgccat ctttttcttgg ttagaagtca gaggtccttc acacactcaa aggcaagagt      360
tgatgcaggt gtgaatcccg gtgccaccgt tggtctgtct gcaacaccag cttccatgct      420
tggatcacac ctcggatgca cacgcttgaa gatcatgtgc cacagaagct catttgccaa      480
ccctttcacc aactctggtc catgcactcg gcagccttca ggccaccctt gaaggttcca      540
cagagcctcc acagacaggg gagtccctga aagtaaaaat acctcatgga ccagacaccc      600
cccaaaacaa agcaaagcca ctgcctcgag                                        630


<210> 1673
<211> 2521
<212> DNA
<213> Homo sapiens

<400> 1673
cttgcccaag gttatgtgtc tattaaatgg ctgcgtctgt aaaattaaaa tgctaactgt       60
ggccaccctg cttctctcac tcccccctagg gctgctgtga tgagagcaaa cacacccaca      120
atgctggcca cacagtagga tgtaataaat cgtggctatt attactactt tttaatacac      180
acaatagcca cagccagtct ggaaggctgt agtggcaatg ccccgagggc aaaaatcctt      240
ggggcccctt cttgcttggt ctctcacttc aaaggctatg cacagtcagt cacaggaaac      300
agaatcagag aaggactcac aacatcctgg aggacgtgat gcctccagga cacaacagag      360
gaccgtgcac cccagaatca actactttgc ctcatctgac cttccaaata gtcccaaaca      420
gaagggagca ggagatgatg gccattggag agaagcctcc agggctgaat ggccccatga      480
atgggatgtt gattctggac cagaatcagg ccttgtttct gtgctcccat tgggccccag      540
tggcacagac cagcccttgt atgctctcca cggctgggct ggaataggct tttgatttct      600
tcccactcct ggctggagga cttgccggtt aagctctgtg gagtgtttac tttttcaaca      660
atggcagcag gctgaagaat aggaaaaaac ctggcccctt tttctaactt agcaggccag      720
ggtccccttа gtaaccaaaa tgccccgagc accagtctcc aggcaggagc tgggacggca      780
cagtttcctc ttgaaggaca atgctgccct cctggtggca aggcctcttc caaaagggct      840
ggcgtggact caagggcctt cctgaagctc actgttccca aggaaagaat tggagcccag      900
ctcgctggac agtgcccggt cccccaaagg atcaaggcaa ctaggggaat gaagaaaggc      960
aagaaaaact caaactgggg gtggggacag gaagcgcgga tgagaagaaa gccagaccgt     1020
cgccaggtgc cggtgcctct catcttaacc atgccatcag tcagggacac tagcatctct     1080
gcatgggaac caagtggggg cgcagagagg tcaaacaagc tgcccaaagt cagagctagg     1140
aagcagcagt caacttttga acacagtctt attgcgggat ctggccagca gcccgcaatg     1200
caacggggct ctctctttgt tcccaggtgg atcggcaggt tgagaaataa tagacacaca     1260
cgagatagtg aaagctgggt .ccaggggggt caccagcttc tggtcctgcg gtgccaacaa     1320
tgcactggat ataccagcat ttattattaa gtttagtgaa ggcggggggta ggttagtgag     1380
ggatttaggg tcatttgatt atgcggtgag atggtcacat ggggatgaag taattctttа     1440
acatagcatt tgtttgtaga agtacagagc ataactgagt ggctcagtat atagagtaca     1500
cagagataag aatttacaat atagtgtgtg cgtcagtaat ttctaacaga gccttaaaac     1560
agaaacacaa tctttccgta acctatgatt agcaagctat taatcagcag taacaattgc     1620
aacaaagct ggttacaaac aatccatgga aacaggacgt gaagctagac aaccagttag     1680
accagaaatt ctcagaaggg agtatgccct aaccctaaag aggcctagaa gagccgtggc     1740
aagatgaggg catttatagc cctatcttat ccatatggac aggcgtcccc ccatgcgtcc     1800
gtttataggc tctccacaag ggtcgtattc cattcccaga gctatgaaca tcttggtgat     1860
gtgaaacctc cctgactgca cgtccattca taggttctct gcatggggaa tcacatcaca     1920
cactgttggc tcattttggc agtccaacct ggcattgtct ttacacaacc ctgcatgcaa     1980
```

965

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ttttgtattt acaataatca ggagcatttc atcttttatt ctgtagcaat agtttcaggg   2040
ggtctccta aacagtctga ccccaaagct gactttcttc tgaagatacc cctaatccga   2100
tcgctcagac atcagaatga gtacctaact gttcaggaca cacagttata tcaacatgct   2160
cagagactgc tttctcttac ataaaatact actttccttt ttatcataaa aaataggatg   2220
ggcatggtgg ctcacacctg taatcccagc actttgggag gccgaagtga gcagatcacc   2280
agaggtcagg agttcgagac cagcctgacc aatggagaaa ccccatctct actaaaaata   2340
caaaattagc caggcatggt ggtacatgcc tgtaatccca gctactcggg aggctgaggt   2400
aggagaatta cttgaacctg ggaggtggag gttgcagtga gccgagattc agccattgca   2460
ctccagcact ccagcttgga caataagagt gaaactctgt ctcaaaaaa aaaaaaaaa   2520
a                                                                    2521


<210> 1674
<211> 1475
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (40)
<223> n equals a,t,g, or c

<400> 1674
gaattcggca cgagattgac ttcaactctg ctttgcaggn aatgccttga gaaataagag     60
ggtaaatcca tttgctgaag gatatcacca tacgtgaaat ttctatctct ccaacacact    120
cctagttaat ccactggatt cttaattgag aaaaatgacc attcccaaag atagcttgat    180
tttatttaga ctattggctt tcatagtata tgttttatgg ttttctacga atattcacta    240
ccctcaataa tctccaccta caataagctg cattgccaaa gggtcctgcc actgccaagt    300
catttgtttg tcctaaactt ctttgttata ttatttktac aaattcttaa aagaaataat    360
tgtcaataat cagttcttga gcatttacta tgtgktttac ataatagaga tgatattaaa    420
tcagcatatt ttccattccc ctgcaaatct ctttgccttg aaaatcacat actctaacag    480
tctcctacca ttcatgctaa gtaagaaaaa tcaacccagg aaagaaagca caaactacaa    540
caaatcaatc ttttgtcaac tcaaagctga ctctcttgag tccttagcaa atctaagtaa    600
atagttttaa aagccaggat ttgtgaaaac aaaatagttt ttctgaattg taatagctcc    660
ctttacacat gttaaaatac aggcttatct agatcatgga aaatattatt tgttcttttt    720
tttttttttt ttgagacaga gtctcactct gtcgcccagc ctggagtgca gtggcacgat    780
cttggctcac tgcaagctct gcctcccagg ttcacaccat tctcctgcct cagcctcccg    840
agtagctggg actacaggca cctgccacca ggcccggcta atttttgta ttttagttg    900
agacgatgtt tcaccgtgtt agccaggatg gtctcgatct cctgacctcg tgattccccc    960
acctcggcct cccaaggtgc tggaattaca ggcgtgagcc accacgcccg gscaatttgt   1020
tcattttcaa gataatacct ccattgattg ctctattatg acaagcmctg awtgatataa   1080
gtgttttgca tgtwttcact cctttctacc ttacaacaat ctccatctca tttgttcact   1140
cgtgtgtccc aagctcctat aacatggact gatagacagt ggacaaaata aatatgtgct   1200
atgtgaataa gcaacttat gaaatatata ctggacagta tatatttcta tgtacatttt   1260
gcagataaat aaacagaggc acagagcagt tatgcttcat ttccaagatt ttatactcag   1320
tagtaataac taagattcag gatagggaaa gtgattctcc taaacttcaa gtgaggtggt   1380
caacgtcatt agagccaaaa caactctaga ttctctaact tcaaacctat acataattta   1440
taggattttc tgccaaaaaa aaaaaaaaaa ctcga                               1475


<210> 1675
<211> 1784
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (555)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (559)
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<400> 1675

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ggcacgagct ggtgtgttga taatgctctg tttcttgatc tggagactag ttatgtgggt    60
gtgttccact tgcaaaaaaa tgcatcgagc tcaagataag tgtgcttttc cgtaaggata   120
tttcatctca atagaaaatt tggctttttgt gtcaactctg cctaaagtaa gtgggaaact   180
acaaaaactg gggacttgga catcttttaa tcaaactatg tatcaatgtc atgtcaaagg   240
ttttgttatg tgtcatcttc cttgaatgag aatggcaaca agttttttttt ttatcacaca   300
gatttcctat gtgccttttt tccccagtcc tgatagtcta tgaaccaacc aaacttaggg   360
aaaagtaaaa cagttaagtc ctgtatttcc accttattta caatataatg ccctctacag   420
aaaataatca cagaaacaca gaaaatgact tctccagaga tgagaaatgt gcatgtgacg   480
ccactctgag ttatctcctt caagaagtat gtattcyata atctgggaga agagtaaatt   540
aacactccaa ctccnaagnt caataattat aatatgagag agacaacagt ggaaagaatg   600
aatgtcctca ggcttaattt actagcmggr aagamcagtc agaggaaaaa aaaaaaaaaa   660
aaagmccgag amcaytgagc tctcttctgg aatgscagaa ggmccacttt ctcctgcata   720
aatgaagsca gggctaatmc aaaacgtttt ctgggtatta tttaacctct cctacccagg   780
ctattttagc tcagtaggaa attcacccac taggtggacc ttggagttca tccaccaccc   840
caataaagat tgcctttctt atttgaagtg atgatcactt cttccaagca aaccaacaaa   900
ccctaggtat tcaacctctg ataacctgcc tactaaggaa cttcagtgga atcaggggat   960
caacgatgct gtccccaaac tggcctaagg tgaaccaagg ggagaagtta acagcagcac  1020
ttaaattgat ctactcatac tcaaggatta ctgagtcttc tgggcaagaa aagaaagcaa  1080
ttacaaacta ccaataagga aaggtgtttt gaaaatagcg aaaaaaaaat gtcccctaca  1140
cttcctttca aaggtagcct cagagctagt ctggctgcgc agatgaccag tgaaaataaa  1200
tgaaaactgc agtacggtta tagatgatcc ttacacctca gcttgttctc aattgcaaaa  1260
aaaaaaaaaa aaaaatgcat ataatctaac actctcctgt ctaaattgct tcaaactttc  1320
tcagaacgac cttcatcgtg gcggattctt tttctgcaaa cctttacagg ttgcacctgc  1380
ttcacacaga accagcggaa acaaactagg aggagataaa agagaagaag taggaaggtt  1440
taaaccaaca caagtcgatt ttgtacccaa aaaaaaaaaa aagtttagtc taaaaaggga  1500
ggtccagtga ggaacaagac agagggtgaa acagaagtct ggcttactcc caaggcagaa  1560
atcatgactc atcaaagctt tcagagggga cagaaccaga cttttgcattt gtcttgaggt  1620
catcttcgag ccaagaaatg ctctcttaac cgggacctga gaactttaag ggtctgcgac  1680
aactggctgt gaggccttgg gcaaaacctc taacgtctct ggggctcggt ttcctcatca  1740
ggtgaagcca gggtccactc tagctttact agtctctcct cgag                   1784
```

<210> 1676
<211> 1743
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1561)

<400> 1676

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ggcacgagtg cattggttgc catgtaaaca gccagcttct ggcaggaaag cagctggacc    60
aggtgacctg gctgtgacag agaacacaga tattgaatcc atgaaaccaa gagtaatcag   120
tacaacgatt ttttttcttt tactttttaa aagtgtttgt caatccttta agttcttttt   180
gtctgactgc tgtcattaag taagaaaaat atgaaataaa taagtctttg ggtatgcaaa   240
attgggaaga tggacaggaa ttagtccctc tatgcaattt cctctgaatc tttcataatt   300
tctgtatcct catcccttca ccctcaaccc tccaacaccc tctgttaccc tgcaggcaac   360
taggacagca tagagagcgt ctcttgaact tgactttctc ttccagtgct tgcctgccaa   420
tcccgtgacc catcctggag aactttttata gtcttcgaca atgcaatgca tagcaaccag   480
ttaataagat aagacagtga ctgtatagtg ctccccaaag tgccatcacc taaaatagcc   540
ctttgraaag tgcycatata gaactgagaa ttttagtgta gtgscaggct ggatttgggt   600
agggtgccyt tcggtggscc tccaaatcct atgggragct taattacttc atctttctgt   660
aaggccaaca gttctcaaaa tttgtggtct caggmcaatt ttacactctt aaaaactgag   720
gragatttct ggtctggaca tgtagtacag acctgttttt cattgttcct ccctgctaag   780
cacaagtata aaccctggaa ataatgcaag agacaaccag ggtagaactc tggaaggttg   840
taaggagaag gcaaactggt ttgagaccca gggaaaaaca aagagcaagg gtatcctatg   900
tttcccaccc agcagaagaa agaaacctag tcctggccat tcctgatacc caactgaaca   960
```

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acagagggca gcccaggtaa gcttactcct ccctcagagt ccctctgaca acatcaggta    1020
ggcccaacac cacaggtaag gggggatctt cagaaacccc accaacaaca gtggacaaaa    1080
gaagcatttg ccttctcccc aggcctgaga tgtcccactt tcacctagag atatcgaggt    1140
gggagggtag aacagacacg aggcataaag tgatggcaag cggcccagtc tgggaaggct    1200
ctgtctcagt gggtgtatga ctgtcctctc ctacccatag agacaccaac agtgcagggc    1260
gccagtagaa gtgtcccacc atacctaccc caactgagag gcacctggaa gcctgaccta    1320
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tccgataaac caaacagagc aaaacaatac tgaaaattaa actgctgtta gaacaacaga    1440
ccacaaaagt aagccaacac ctgcttgcat gtgaagcata ataatgtga ctgactgcaa     1500
aaataaaaaa tgtaaatatg agtttcctaa catagtagac aaaatgttca atcaaaaatc    1560
ntctgtcata ccaagaatca agtaaatcac aacttgactg agaaaaggca actactgcca    1620
acattaagat gagttcgatg ttggaattat ctgacaagga tttcaaagta gccatcataa    1680
aaatgcctca acaatcaatt aacattatct taaaacaaat aaaaaaaaaa aaaaaactc     1740
gag                                                                  1743

<210> 1677
<211> 1201
<212> DNA
<213> Homo sapiens

<400> 1677
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cagctaatct tctagcaacc ccgttgctgt ccatggcaag caggttagtt actctcgccc     120
tttcccgttt caggttcatt aaaaaactct tgtcaaaatc tctttcatcc catcttattc     180
ttcattctca cttccatcag catatcagtc caggccctag taacattaat gttactaatg     240
gcactgttag taacattact taccagcatt caagtgggtc ttcctgatgc cattctctcc     300
catcctgaaa tcactgctgt ttatatagat cttgtatgat gtcattcatt ggctcaaaaa     360
cttttaaagc cttccttttt ctaccacccc aatctaaatt tcaatgcctg gctttattta     420
aaacccataa tttggcccca ccctagctat ttaactttat tttccactat tcgccagtct     480
cctccctcat caacgagaag acataccata atcaacctca cctctaaccc ttggaatatc     540
taaacttaaa aatggtcctt ccttycccct ttactkgtat ttaaagamcc tgatgaatta     600
ttcctcctct gctaaacttt tcacaattct tcaacctcat ttatgtttca cattttcaga     660
acatatcttg ccgtttatta ggaatctcac aattaggcac tctcatgtag atagatttac     720
gatcatgtat gttgtcatct tctattaaat tccatactcc ttgaaggcag gagccatgcc     780
ttattctgtc ccccagagta ctcagaatga tgcagagcac acagaaagta ctcaaatctt     840
gttgactgat ccagtgagaa atgaccaact tcagttccag cctctcttta acatgtacat     900
agcaatttgg gcaagtcaag ctccatcctg aaggacataa tagggggactc tttaagcaca    960
ttattatgaa ggcccttcag ggataacacc agagtgatga ggtgccctat accagggata    1020
atggagacag agtacttggg attcatcact ggggtcctca aagcatcttc caagggcata    1080
ataaggaagg actcaaacac ctttgaatct ctgtgagacc agtcatgagg tcttttgaaa    1140
gagttcttta actggagtga atgtcaaaga gaagtataat aaaaaaaaaa accggcacga    1200
g                                                                    1201

<210> 1678
<211> 1815
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1360)
<223> n equals a,t,g, or c

<400> 1678
ggcacgagcg acaagccatc cccctgccct tcctgcaggc tgccttaccc attcagaggg      60
aggccgaggc tgtgccggag cggcccacag ctgcgggacc gcgttccagg gtgtgctctg     120
ctgcaagcat gagggaagga cagttaaaag caaaacggaa gccttgcatg ggccgcttat     180
gcttctggag ctactttttt tttttttttt ttttactat acatggtatt tagataaagg     240
tctagagtaa aaggctctac aaccatctta tgttcagagg tcagtgtgtg acttaattta     300
acatttcctt tacttttgtt tttctccatc ttgtatttta tagccagagc ctgaacctcc     360
tcgtcgattt tttgtcgacc agtgggagct ttctcttagt ctccgctcct ctgcccgccc     420
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968

```
cgcctctccc tccyccgact ccytccgaca ggtagcatgg cctaggactc actaaaactc    480
tgccctccgc agcctccact cacgtcactt tcgcaagtgt catgtacccc aggaggctgc    540
agtgttcctc acttgggccc gtctcctgta gggagccagc tgcatgtgtt gctgtttgcc    600
tgtgtcggtc tcgtgtgtra ggtctgtggc acactcctca gctaaagtgg ctgctggctt    660
tcatccaamt gawctgacac atccaggtct gttgatgtga acccgctttg atcctatttc    720
aactatatca aataatgata aatgttttgc agccattggc ttttttaact tcacatgtct    780
tccaaaataa tatgtgttaa aaagtaggaa ccacaatgta attaaatcac ctcaatggag    840
gggtgatgat gcggtattct ggctgcctgt tgtcatcatt tgaggaatgt acgcgrctgt    900
cacctgaagt agcgctggtc cagttgtagg gagtttctag agagattgga aggtctcttt    960
gccactccta ctggtatttc ccatgcctga gttgacgcca gacctcacgt cctatgtgca   1020
tggtagcata tgcacgcgta tggtgtgcgg cgggatctga agtagcactg gttcagttgt   1080
agggagtttc tagagagatt ggaaggtctc tttgccgctt ctactggtat ttcccatgcc   1140
tgggttgagg cctatgtgca tggtagcata tgcacacgta tggtgtgcgg tgggatcgat   1200
cccgcaattg ccacatttct gctatttttt atgagtgatg agaaggaaac catcgctttt   1260
catgccagaa acaaatagaa cttgagtctt cacctctctk gcagggatgc ttgtcagtgt   1320
tgccaacttg ctgagaactg aatgtggcag atgcctttgn acgggcagcc ccaggtttag   1380
ttcaactaaa cccagatggt ttagttcagg agaaaagggt cctggctgag cagtgagggc   1440
ccagggctgg cttggtgtcc tggcctcata cttggcatct ggcccacact gccccgtgtc   1500
tgctgcagaa tgagagaaat gccattttct gctccctcag tgtcagctgt taagttacct   1560
gctcagctct gcctggtgtc tgtctgtccc aagcctcagt ttctttagtg tccctaaaga   1620
aggtttagat ctgagagcca cgtgtttgtc ttgaccacta ataggtataa tctgtgaagt   1680
taatgggcaa atggcaccaa tccttgggaa tcttattttt gaattaaaag ctataattgc   1740
ttcttcagtt cagctgagcc ttgagctgag ccacaagaac ggcttcgtcg tgtgtgcatc   1800
tgtgagcccc tcgag                                                    1815
```

<210> 1679
<211> 925
<212> DNA
<213> Homo sapiens

<400> 1679
```
ggcacgagca gaaatgtagt tgtaaggaaa aatgaaatga aaaagtttga aatctaaagg     60
aaaaaaggaa atctaagtag caggccaaat ttatctgcaa tgtaaagcct ccttgatgtt    120
atttccttta tttttcatac taagtatttt tagtgtacat attgtaaatt caactttaga    180
aatggaaaaa cagtcccaaa gggtgtaagt atcttgacca ccatatcaag agcactgtgt    240
gagaggcaag atggaaaccc atggctactt catgacatag cctctaaaga gacggtgtag    300
gtaggacccg tcatcttgct tcagcaagtt gccctggttc cttgccgctt actcctacct    360
aggccctaat tctttcatcc agctctatag cctagggact tctcacatgt tttgtggcaa    420
atgggatacc cttagaaagg aagcagatga ggagagacat agcgcaaggt atggggaaag    480
gggtagggag cttctgtgcc cactaggggc atgctgccct ccatatgttc agctagccag    540
aagccgtctg aatcctgtcc ttttggtttt gatggaggtt ttcatctgta ggcgtgactg    600
attaaactgt tgtcctgcca ctggggatca aattaacctt ctgcctcttc ccgaatgctg    660
ggrgggggggg ggcagctgaa agccccaacc ctcctattcc ccaaactaga gctacctagg    720
tgctgccagc catgagtcaa ctcactagca tataaaaga caccactttg tggagatttt     780
aaaaattgta gtagttgtat gccaggaagc agggtctagg accaaatatg tattacacaa    840
tatcacacct gtgcatacca gctcaatcag aacacaaat ttcaaaaatg atactgaatt    900
taaaaaaaaa aaaaaaaaac tcgag                                          925
```

<210> 1680
<211> 921
<212> DNA
<213> Homo sapiens

<400> 1680
```
ggcacgaggg catgcctccc ttgctgcagt acattccctg atcctctcaa caagctcacc     60
tctgtaagct gctggcctcc ataacctgct ccaactcatt cttcttgccc attggggaac    120
acctctcctc tgtcctgctc tcccatatgc tgcaaactca ccctctgctc tcccagctcc    180
cagctcctgg gcccaggttg gtcgtttctc ttgctttcct cctctactgc atagcacggt    240
actgtcccac ctgcaccatg ctgcgttctc tcagcaccac ctgtgattct gccactggcc    300
taattcgtgt tctcaggtgt gtcctccctt cttgacctgg ccccgcaccc actgctccac    360
cagatgcagt cctctctgtg tcaaacgtac tgcactgaat ccacacgctc tgctgtccaa    420
```

```
gctcacgtcc cagtggccca ggctatgagt cctttccagg gccccacaac cctgactccc     480
ctaaaccttc ctgattcttt tctcatcctt tctttcacac tgtgtaaaaa cactctgggg     540
agcctctgcc tctgaatctc ctamcttctt cctgtcacca gagtagtttg tctttgtcac     600
tcattcgtgt cccactttct gcccatcctc gtccccccgg tacgaatgca mccagtctca     660
acctgamtct cctgccctgs ctgagamcca gctcctctgc tcctcctggg tgctcctgtc     720
agtcccaccc tcctcccacc tcctccctcc ttaaggccca tgtcttcaag acgctctcct     780
tccacactgt ctccatttcc ctttgcacct tccctccccg tgacaacaga tcccctgctc     840
tctgctctca cccgcacagc ccacttcctc tgtgtcactg gcccctatc ttggcctcac      900
tcctccacct gagtcctcga g                                               921
```

<210> 1681
<211> 979
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (773)
<223> n equals a,t,g, or c

<400> 1681
```
ggcacgagaa tagggctacc tggagcaaac cctggctccg taggatgnat cctggggttt     60
cctggctgct ggggcggcag tctcgccctc ccagtcggcc tgcggttggt gggtggggga    120
gggggcggtt ctcgctgcca cggatccaga aggccaaatt gaaccctcgt tctgggattt    180
ctggctccta ctcccgcagg ccgcttgggt gactgtcctt ttttggagag gatatagaga    240
cacagctgtg gcctctgcac actgctcttc ttccaggctc aggaaaggcc ctcgcccagg    300
atgtcgccac tcagaaggcc gagacccagc ggtcttcaat agaagtccgg gaggccggga    360
cgcagcgttc ggtggargtc cgggargccg ggacccagcg ttcggtggaa gtccaggagg    420
tcgggacaca gggttctccg gtggaggtgc aggagsccgg gacccagcag tctctccagg    480
ctgccaacaa gtcggggacc cagcgatccc ccgaagctgc cagcaaggsa tgacccagcg    540
gtttcgcgag gatgcccggg acccagttac tagattatga aggcatctca gsccctggas    600
ccagagccag tcagggktta aagtgaaagc ccgtatttcc gcccagaagc tggggttggg    660
gagaggatgt ggattttttg ttttaccctt tctgttgcat ggttgcaaac acaaacttga    720
gttctaataa agaattgcaa agtggaagcc cgccccccgc ctccccccyc mtnacttaag    780
tccaggaagc tggggtggcg aggaaggatg atgtggattg ttttttgtttt acaccttctg   840
ttgaatggtt gccaacacaa acttgagttc taataaataa ttgcatttcc ctaacgtctg    900
tattttggaa ggtagagggg agggaaaggc gcattcctcc aacagcccag ttctgccctg    960
cgcagccctc tacctcgag                                                 979
```

<210> 1682
<211> 548
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (37)
<223> n equals a,t,g, or c

<220>
<221> SITE

<222> (56)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (548)
<223> n equals a,t,g, or c

<400> 1682

```
tgtntgaaat tgtgaccgga ttaacaattt cacacanaaa cagctatgac catgantacg     60
ccaagctccg aaattaaccc tcactaaagg gaacaaaagc tggagctcca cgcggtggcg    120
gccgctctag aactagtgga tcccccgggc tgcaggaatt cggcacgagt gtgcatatat    180
gtgcacgtgt gtgcgagtgt gcgtgtgcat gtgtatatgt gcgcatgagt gtgcatgagt    240
gcaagtgtgc atgtgtgtat gtgtgcaagc gtgtgtgcac atgtgcttgt gtgtgcatgt    300
gtgtgcaagt gtgcatgtgt gcgagtgtgc atatgtgcat tgtgtgcgtg agtgtgcgtg    360
tggtccgtgt acacatctgt ccatacatgt gagcttgcat gcacatgtga gcatgtgagt    420
gtgcatgcat gtgttgtgtg tgtacgtgtc tgcacgttgg tgtgtgtatg tgtgtgcctg    480
tgagtgtgca gagaggccct ggcgctcgag ggggggcccg gtacccaatt cgccctatag    540
tgagtcgn                                                             548
```

<210> 1683
<211> 975
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (401)
<223> n equals a,t,g, or c

<400> 1683

```
ggctgcagga attcggcacg agcttcaatg aaatttatag aaaagactct cacaagtacc     60
attgaatata gttttctgat gattttgaga tcgtagtatt tgactgggta agaattccga    120
acttcagtga aaaaactgaa ctcaaaaaac tactaaccca acatcaagca gaataagaat    180
tattacatgg gactaaagca atgaaagatt atgattttat gacttttttg tttggcacat    240
ggcttattct ttcatgtttc attttccaca ttaatttttt ttttctttca gctatctaca    300
gtttacggga atatgggaag gtgtactttt gtgtgcagaa ttgaaatttt ttttctccc    360
tacctgatcc ctccagagtt tggagactat ttgtgagtat ncttatttca ataacaatat    420
agttatttgc ttacatttaa gaagaatcta ttctctttct aataggacac aattggaaac    480
attggccata ttaccaaggc tttgcctgac atgtcctatt ctgagatatg accagattgc    540
tctaaggaat taaagttgac tttataaagc caattaaaac cccttggaaa atctatcttg    600
atatcttgga taaataatta acatggttga tttacaggtg agaaaaaatg tcacttcctg    660
agaggccctg gaacctgaat atattttgg gaaccttgag aagagaagta ttcactcaag    720
tttaaaggta ttacaggcac aatttgaggg tgactcctcc ttggattggc ttcccagcct    780
caagaggctt tcaaaagttt aatctgagat tccttgtgaa aagttccagc aaagcaaaat    840
tgaaaatgag cttatatgat taatcatcat tttgctgtac ttctgtaaat tattaggcaa    900
agtataacaa gcctaaaact tattttgcaa acaaattagt tttattgtga ttaactttgg    960
taaaaagggg ggaac                                                     975
```

<210> 1684
<211> 481
<212> DNA
<213> Homo sapiens

<400> 1684

```
ggcacgagga agaccccact cttccctcat gaaccatagc agataagtta tcacccctta     60
ccattaagta tccaaaccct tattaatgga aatcatccat tacgctgccc ttgcaggaat    120
caccctactt actctactct ttgccatagg aatatatact gtcttgcctc ctgggtggaa    180
tttcagacaa aaaaaactca atattcgtaa cctcttgcct cataatcctc ctcatagctg    240
gtataatagc caccaccaac agatagtggc ccctcctaaa tgtcctgtct ttgcccatcc    300
tggcatttca cactcttcct tcactgcatc acagaaaacc tttcatggtc ctacccagaa    360
```

971

```
catcccaccc tcacagcatt ccttgattgg atcaccaatc ttatatttca aggggattta      420
caggaattca ctccagatga agccgaattc tttacctta  cacttgctct ctgtctattt      480
a                                                                      481


<210> 1685
<211> 825
<212> DNA
<213> Homo sapiens

<400> 1685
gcttacttgg ttcagctcat ggactggctt cttaattctc tgtatgctgg ccttttgttt       60
ttttccataa aagcactttt ctttagtttc cataaaatcc attttcagaa accagttgtg      120
caaagcatag aattttttta aaaagatacc tgcggatggt agaggggatg gggaaagttc      180
tcactatgtg gcaatattaa taaatacaga ttaagtattg ggtatctttg ctatttaata      240
tcctcaggct actcttcact gccctttccc aggttccctc ccactgcaca tcatctctct      300
gactcctctt tggtgccttc cttctgccat agcttgttct cacatcctga gttttggatt      360
tcccccagaa attccaaact ttccaactag gtcatacaaa gcaattcagt tctcttcagc      420
ctctattcgc aaactctcct tttgatattc acactcatcc tgttgcttga aggacccttt      480
atttgccata atcaatcttc cttagaaagt agttattcag gctgggtgcg gtggctcatg      540
cttctaatcc cagcattttg ggaagccgag gcaggcggat catgaggtca ggagttcgag      600
acccgccctg ccaacacgga gaaagctcgt ctctactaaa aatacaaaaa ttagctgggc      660
gtggtggcgg gcacctgtaa ccccagctac tcgtgargct gaggttggat aatcgcttga      720
acccaggagg tggaggttgc agtgagccga tatcccacca ctgcactcca gcctgggcaa      780
cagagcgaga ctctgactca aaaaaaaaaa aaaaaaaaaa ctcga                      825


<210> 1686
<211> 455
<212> DNA
<213> Homo sapiens

<400> 1686
cccccgggct gcaggaattc ggcacgaggt tttattagtt tccttggatt gggtttcaac       60
cttctcctgt atctcactgg gcttctccgc catccagatt ctgattctgt gtctgtcatt      120
tcggacattt catttctggg ggagttattg aggtagtttg tggaggtaag aagacactct      180
ggcttttaga gttgccagaa ttcttgtgct ggttctttct catctgtgtt cactgatttt      240
cctttacttt ttgacattgc tgtcctttgg atgaagctat ttgctttttat attctttgat      300
gttcttgagg gtttgaaggc agtataaatt gtgtttagtt gattgacttc atttctggat      360
gctttcagga ggccaaggct cagcttagca ctcctgagct tcatgctaat gccttgggga      420
ctgggactgg gcatatggct ttgttctttg acctc                                455


<210> 1687
<211> 811
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (107)
<223> n equals a,t,g, or c


<400> 1687
```

972

```
aggcnncccc aggctttaca ctttatgctt ccggctcgta tgttgttgtg gaatttgtga      60
agcggataac aattttccca caggaaacag ctatgaccat gattacncca aagctcgaaa     120
ttaaccctca ctaaagggaa caaaagctgg agctccacgc ggtgscggcc gctctagaac     180
tagtggatcc cccgggctgc aggaattcgg cacgaggctg gaagtataat ggaggccagt     240
tgggggagga gggggaaaag attcactcta agtctagatg ctctagcacc cacccaggat     300
gtgtgcaagg aagtgcagga tgctcctggt cttgcaaact gtggtttgtg ggactccaaa     360
gccctatcc ttccacgatg ctttctgtcy tgttatcaca tttccttgga ggagarccca     420
gccttggtgg agagccctgc yctggctttg tccctcsgca tgagatggca aaggatggtg     480
ctgctgggag accctcacrt ctgyrcactg ggggctgctt gccttctcca ttcctccttc     540
aagtatctga gcagctcctg tgtgccagct gctggtctac aagatggats ggtccttgga     600
gatcaygctg tagcagagga ggcaggctgt agcccacacg ccacaaccag ccccctgcct     660
gttcacacaa ataaagtttt attggaatac agccacaccc atttcagtgc atattgtctg     720
tggctgcttt cctgctacaa tagagagttg aatagttggg acagagacct atggcctgca     780
aagctgaact atttaccatc tggcyctcga g                                    811
```

<210> 1688
<211> 636
<212> DNA
<213> Homo sapiens

<400> 1688
```
ggcacgagcc actactgtcc aacatcaatt tggaggttct aacagatgca ataataggaa      60
aatattaaat gattgttata aacaaaatta aaactatata tctttttctg gttatgttac     120
agttcacgcg gaaaatccaa aagattttaa agaaaaaaat ctgctggaat tagtaagata     180
atttagaaga tggcttgaca gataatatat ctgtcaaaat cgtttccct tatttccaca     240
aaaagcatct agatatagaa gcagaaaatg ttttcatta caagggtggc aaatgttaca     300
tggtgcctag aataaattta gcataaaaaa aacccagtcg gccaggagca gtggctcaca     360
ccggtaatcc cagcactttg ggaggctgag gcagccagac cacctgaggt cgggagttcg     420
agaccagcct gaccaacata gagaaacccc atttctacta aaagtgcaaa atcagccggg     480
catggtggca catgcttgta atcccagcta cttgggaggc tgaggcagga gaattgcttg     540
aacctgggag gcggaggttg ctgtgagacg agatcgcgcc attgcactcc agcctgggca     600
acaagagcga aactccatct caaaaaaaaa aaaaaa                              636
```

<210> 1689
<211> 1132
<212> DNA
<213> Homo sapiens

<400> 1689
```
ggcacgagct tggagcacat tgccaagcat ttgtgccagt tttttctaca ctggaaaata      60
aaccctggcc catgctaatg aatcaggtcc taacagcacc aattggtctg gttcttcttt     120
tgcttttttgc attgctgaca tttcctcctt ccagctctat cagggaaagg aattgatcat     180
ttggataaga aacaaaaaaa agtctctctc tgcttcactg tgtctcttat gtgtggtgct     240
actgtactgc cttaggaaca agcatagtgt gtctattttt agggcaaatg tgcctactct     300
atcttcgcca actaaatctt tctacatgac taatttgcaa gttgaattat cttggtaaat     360
aggctgactc actagcaaat aatctgcaga atttatgcat taggcttctg tagtgaatta     420
ggtccttttg tcttgctcag catgctgtaa taaactgcag tagtgctctg gttaataata     480
aaaaaaaaga aaggcaagga agagaagtta ttccaaacac atgaagagtc tttctttaga     540
atagttagtt atgatagaga tatatatagc aggttatatt gagagatatg gcaatgactt     600
aagtcaaata aggaaatgaa ccatgatata aatagatata tgcatagctg atgtgtgtat     660
atgtaagata tgttttgtgc ctctgtttgt gtgtgtatgt gtgtgtatgt ttatctccta     720
aatgagttaa tggaataatt tatacttaca taatcattta tcacaaaatg tgcatagcaa     780
tcagtatcca acagctagta gtcattcaag aaacatttgt aaaatgaatg aattgcaatg     840
ttaggttaac attctccatt gtcagtggtc ctcccttct gctgtcccta ctccctctat     900
gcttgtggtg attcagttgc agaaagacac atctatactt catagctgta gaaaaattct     960
ttttttgtgg ttgatttcat gtggtttaaa aagaatgcca aattatttgt acctacaggg    1020
ataatgaccg actaaatttt tttttcatat atgtgcgtat gtgtgtgtct atgtctgtat    1080
gtatagtcta aatattattg tccaatcatg gcagggatta tggttgtatg ta            1132
```

<210> 1690
<211> 1062

973

<212> DNA
<213> Homo sapiens

<400> 1690
```
agcacgaggc ctttggtagc ctgccagcgc ctccctcatt tcccacatgt cacatgactt      60
cttactgtcc agccggctct gttcctcggt tgtccctccc aagcacagtg cgtcctctcc     120
tgggatggct ctattaataa ccctcatgtg gatgttctgg gacggccatt catgcttcct     180
gtcctcacgt ctggcccca ctctacgcca ttcatgagag tgaccccccag gcgtggctgg     240
ctccctccct ttctccactg ccagcgtgtc tgcaggatcc aaggtgccat gtgtttgctg     300
ttcacagtga cccatgagtg agaggcagcg gcgttcacac catagtttaa gttaacaatg     360
cccggctggg acgtgcgctg tgtggccctc ctcggggact gcagtgtggc agaaaaaaac     420
accctgagct tcctctcttc tctttctcct gctgatattt tgctgcccct aacaatcatt     480
ggatccaata taagctataa aaggcagcct cacaagtgct gagcagggga ggaagatgga     540
gaggggtctg caggggcgac taaagattcc cagcattaaa ggcaactgct atctatcaag     600
gatattcatc catctaacgg gggtaataat ttatcctaga ctgttgctaa ggctgagtta     660
atatagctga agtgtactat caaggttaat ggcacccacc tgagttcaaa tctttgcaca     720
catcctcact taaatgtaaa aactcaacaa agaatgcaaa tgaagccatg actcactcct     780
tcaacattac taggagacag aacccaacaa acttcaaata atctgcaggt agaaaaaaac     840
caccaaatac cagcagacct tcactgcctc tataggtcat gagcagggtc aacaggtcaa     900
gggaggctta aaggactcag tacaggccag gcaccggggc tcacgccggt aatcccaacc     960
ctttgggagg caaaggtggg aggattactt gagctcagga gtttgagacc agcctgggca    1020
acatggtgaa atcccatctc tacaaaaaaa aaaaaaaaaa aa                       1062
```

<210> 1691
<211> 675
<212> DNA
<213> Homo sapiens

<400> 1691
```
ggcacgaggt ttggaattta ttttttgtct gtgatgtgag gtagggatca cccctccccc      60
atattgtaaa actacctgtt atatgctttt acatttgtaa ctgtttcatc tagcatagct     120
taagtggtga tgggagtctg cttttgagct tcatctatgc attggcaaat acagttaatt     180
aactggtcta gtttttatc tctatttcc ttcttgcaga tcagtgctca gagtcctaag     240
tactgccttt caggccccat aatgtgccct tgtatcctct aacatgtctg gaatttgcgt     300
aggctgtgct ggggcaggga aaggagagtt tctttgtcac aacaaacaag gggaaagctt     360
tcttcctgtc tcttcgattt accaatgcct catcagaaac tttcagcact tatgtaagaa     420
atgtatttat tttcttgaac tttagtatat ttcgtttgtt ttacaatatt gtagagtaga     480
aagttgtttt tgcttaaata tagtagtttt ttctttagtc ctatacattt cttaagttct     540
taaatatgtt tcttgatatt tttagcttta tattgtggtg ttgtgtattc tttggaaagg     600
gattagtggg ctctgtgcaa ttatgaaaca acaaaataag gcacatgtgc atgttgcaaa     660
tatactcgtg ccgct                                                      675
```

<210> 1692
<211> 835
<212> DNA
<213> Homo sapiens

<400> 1692
```
ggcacgagct cgtgccgaat tcggcacgag agaaggttca gtctcagttt agctgtagtc      60
tgctcagggt ctcacacagc tggactcaag atgtcaactt ggagtgctat ctcatttgag     120
gctcagagtt ctctttccag gtcaattaga ttgttggcaa aattcaattg tttgaggctg     180
tcagattgaa gaacctatta ctttgctggc tgcggctgag gacaatactc agcatctaga     240
agccatctgc ggtttcttgc catatgacct gttccagagg ccatctcaca ctaccaatct     300
ctgacttctg tctccaacct ccagacccag acttaaaaga ctcatgtgat tagggcaggc     360
cactcaaata ctcttccttt taactcaaag ataactgatt agtaacctta attatagctg     420
tacagttcct tcttccacgt tatataacat aatcatgaga atgatttccc atcatacatc     480
atattcagat cttcatcccg tacccttcct tcctaaatat ttcagcttca agtggaggga     540
ttgatataag acgtggatac tagggggacag gaatattggg ggccgtctta aaattctact     600
taccacatag atttttcataa ttattgtatc atcatagtgg attatgaact ttttcataat     660
gtgatgcatt taaaaaatca cctttactgc ctcaaagctt attttaaagc ctgaaattca     720
agtttgtctg aattatgatc ccaacactac ttagtggttg tttacacttt tttggtattc     780
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974

cttttttccg tcttttttatt tgcaaccttt ttgagatact ttgtttttata agtac   835

<210> 1693
<211> 598
<212> DNA
<213> Homo sapiens

<400> 1693
ggcacgagcc cattggcact tattggttcc actggccagt ccaccctacc caaggacagt   60
gtcccctcct ccattgtctg ctgccatatt tgattcctct ctactctatt atgggtcagc   120
aggggcgggg gcccactgtg agctttcctc atgcccttgg cctcagcctt ctgagcagac   180
acctgttcct acttgtcttg gtgcccaggg tagcaggagg caaagtgcac tcaggacccc   240
ttaactctaa gattgtcaaa caacgacaat ccccttgggg ccagtcattg ggtgggttca   300
tggttccttc tgagaaaccc catatgcact tcattctttt catttcccat gctctctctt   360
ttggcctgaa gagagtattt ttccttagaa gaagcaagta gttaaaaaat attttcttct   420
tttctttgac ctagagctta acaaaagaca aaactcagat gatgaagtac ttaacatctt   480
ccttctttct ttcctgctga cttgatgact ctgctttgga gcagtggggg cctcagggtc   540
gcagtggaga aagccatggg ccagtgggag gtgaaacgga gccaaaggtg ggagaggg   598

<210> 1694
<211> 1445
<212> DNA
<213> Homo sapiens

<400> 1694
ggcacgagtc agtacacata tgcattgcct aacgatcaag tcagggtatt tagcaaaccc   60
gtgacctcaa atatttatta tttctttgtg gtaaacactt ttagaatcct ctctttttagg   120
aattctttgt atagtttcaa ggcttctgcc acctccacag aatgcttttt ggttctctct   180
gtgatctgca cagtgcattt tttctcattt catctactgc ttgtcctaca ctttcatttc   240
ttcatagcac tcctgatgta tttcaaaatc tttaaaagca ttactggtaa tcatcataat   300
aataataatg aggctataac attttccata ccacagtctt agaaatcatc tagtttatta   360
cgttcaaaaa atttcccaaa agaaggccta ccaaacatgt aataagccta aaaatgtatc   420
aggcactagt tcagaggctg catacaccaa tctgatgctc ataaactcat tctagctatt   480
tgtacaatac aggctttctt ctccaaggtt tccatagagt cctagaggaa ttattagaat   540
cctgagccgg aattaaatga aatgagtgtt aaactgtgat ctggtaaatt gaggtagatg   600
gtgcaaacag ctgattgtta aaggaaagta tcctcaagcc tcacagttgc agggtctgtt   660
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tttgtgcata atacatatga taatctgagc tttaaattaa tccctaaccc ttctggataa   900
tacgctgcag gtaatttctc cttcctatat tacattgcgg aagctagaat tcagaagtat   960
agtcttgctc accttttaag gataatagag cttcaaaaca gtattgcagg aagcaaagtg   1020
gaataaacag aaaactgtca aactagatgc cactactgtg agttgttgaa aaggttaaat   1080
gtcagaagca aatataattg gatgactgga atgaatgact aagtgctttt tacactaagt   1140
tgcttgtttc acaagcaacc ctagaccctt agaaacaggg ttgatgaagt caaagggacg   1200
gccattctgt cttgtctttc cccttctcag atcagcagaa aagcagcaga aaaacatggt   1260
gttggattgt agtccctaca gatttggtac ttccaagact ctcccactcc agcaaaaaga   1320
aaggacactc ataacctttc cttttttttct actccatggt aaaaatctag agatgggtat   1380
agtgcaaaat attcagattt tggagaatta ttatccattt tgtacttaaa aaaaaaaaaa   1440
aaaaa   1445

<210> 1695
<211> 888
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (380)
<223> n equals a,t,g, or c

975

<400> 1695
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cattcaaaac cattttcaaa tccatctttta aactagtcag aaaacaggtt attattttttt   120
taaatcactt aacactgaac agataagacc tcttaaaagg cagctgacta tatcatgtca      180
ccatcatagc caatacaaca tttttgccat acttcctaaa aaccttttcg catacactga      240
tcatgctact tatcagcact ttctaacatc ctgaccaaac agacacccac acctcttata      300
gagtacactg tgagagataa catggacttg atatggcatc acacttgttt taaagcaaaa      360
aaaaaagaaa aagaaaagan aaaaaaaagt ccaagacaag aaactatata actgagmgag      420
aggagagaga gagagatctg aggtacatga tataagggtg atgaacataa tggaaaaaat      480
ccaatggccc gatgatttgc tggggatgta agagttggcc agcmgttaag ractaaaccc      540
aattaaaaww aaaatwgraa ctttgktttt carggacagg cacctgtcaa aagacattgg      600
atactgtaat ggctacagtc agtaaggcac tttatttccc caaagtaggc tgcaggcgaa      660
gggatgcagg ctgcagctac agcatgcacg tacacatttg ctgatggctt ctcaaaacct      720
gagccgagaa tagggtctga tagcccagcc aagtttaaaa gcagacacac acgaatgtag      780
tatcgttgtg cctgaaatga ccattctggg ttgtttagaa tccagaatca tcaaaagcca      840
tgtggtatga ggaagtaata aatatcctct tgaatcttct ctcgtgcc                 888
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<210> 1696
<211> 642
<212> DNA
<213> Homo sapiens

<400> 1696
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gattcttgta gtgcccccca gtcccggaag gtgtgtgtct ggcaacctgg acttaccctg     60
ttaaacactg gcagcatcat atacagtttc tcttcttgtt ccttctgagt catgtgccgg    120
ggaggatggc acaactccgt gaagagccgg cggaggtgca tcagtcctaa ggcgttgtct    180
tgtgggctgc actcctcctg cctcggccgc cccatgatcc tcttcaccat gttcatcttg    240
gctggttggt gagacgcact tctaattctg taggaaaatg tcaatacatg aacagtcaaa    300
acatcatcat cttgactagg tcaagcatgc atgtaagagc ttataagaaa tttgcaaaat    360
agaaaattct gtctaaaata tatctttcta cttctttaaa cagaaaagac agagaagcaa    420
aatttgataa atcccctga agggcaaatt atgaatctca gcattggaag ttcttactca     480
ctttgccaca atttgtataa aatgtaaaac attaatcaga caagtaataa atgtttccaa    540
ttagtttagt catatcaagt tcaaaaataa aggcgccggg aatagtggtg cacacctgca    600
atcccagcac ttttggaggc cgaggccggt gaatggctcg ag                       642
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<210> 1697
<211> 826
<212> DNA
<213> Homo sapiens

<400> 1697
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aaataacaca tgctttttty ctcttagtgt ttaggaggtc aaagtctaaa agcaaggtgt     60
tggtaaggct gcattccttc tagaggtttc aggggagawt tgtttccttg ccttttttcag   120
catctaaagg rtgtctgcat tctatggstc atggactcct cttaatatca ctccaacttc    180
ttggtcccat tatcacatat actaccattt ctgatcccac taccttcctc ttataaagac    240
tcttgtgatt acattgggct cacccagata atctgagata atctccccat ctcaaagtcg    300
ttaacttgat cacatttgca aagtcccatt tgccatgtaa gataacatat gaaatgttct    360
gaggattaaa acactattct gccaactaca atgatgaagg aaatatgagg aggaatacta    420
gatcttaggt tgcaatgatt ttgaagactt tttgaatata ggcacgggaa gcactgacct    480
gctgtggcct ggacttccat ggttcctttt ttgaaatact agaagataag aatcattgat    540
agccatctta gaatcgttct gccactatgt acatgtgtat gaatgtgttc tcttgtgtgt    600
gtgtgtgtgt ttgtatgtat gtgtgagata tggttagtgc aaaagttgtt gtggtctttg    660
ccattaaaag taatgcaaaa actgcaaata cttttcatc aacttagtag ttgttttcag     720
taggtctcat aaatgtctta gaataaattt cttacaatgg ctgggcacgg tggctcaagc    780
ctgtaatcct agcactttgg gaggctgagg caggtggatc actcga                   826
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<210> 1698
<211> 2099
<212> DNA
<213> Homo sapiens
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<220>
<221> SITE
<222> (644)
<223> n equals a,t,g, or c

<400> 1698
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tagaaagcta gaaacttggg gcactaggtt tccaatgatg atacaactgc tatttctatt    120
aaatgtctat tctagtccca ttgcaacatg cttgatatac ataatctcct ttattgctcc    180
aaacacatct aaaaggcagc attatcttta ttaccagatg aggaaaatgc ttagaaatac    240
tttgataatt agatgtttgt cttatttat gttcttgtaa tagaagtata tttatttaac    300
tcttttttac cagttaattc tggccttcct tgacagtgga atttgaattg gcatttggta    360
ggcagatata atacaactgg tataagttat tgatkgatar aakcattcca agaagamaat    420
agaaatattt atgcaattcc aaaatgtttt taaaatatta attatgctta aaatatgtaa    480
gggaagagtt cttatggctt atagttaaac taaacttttt ttataattgt atttcttgtt    540
ttaaatcatg atgcaaaata acaaagagaa tattgtgttt aattttttag tattaaatga    600
ctaaaagtta ctgggattta ctaataagat ttatgattcg cctnctctta ccatgttata    660
gaatgagtag aatgagtgtt tatttccaat atggtatact atatgcagca aaaagaggct    720
acgttagtaa tgaataataa agtcagagaa agtcttcatg atgagcaata tttcagttgc    780
caagtctgtt gcttttctta aatccattta tttttactat tttgctactg tttccctgtg    840
gagggtttaa tacttctatt ttcttcctta accaactcga tagttaaaga ttatatggag    900
aaatgtactt aagtgtaaat ggaaatgcct ggctgtgaaa gtctattggc ttttcttaaa    960
attaggagaa tatttatagt cataaaaaaa acagagatgg ttgattacaa aggagagtag    1020
actatgagct taagtgagct acttgagaaa acttttgtc actttatcac atgcacatgg    1080
cacaaagttg agttgtgatg tgctataatt tgagaaagga gtgattatag catctttctc    1140
attctcccgc ccccagtacc tgataactcc ccccactgaa tcacttagga agctcttgga    1200
attgtgtgcc tgatgtacgg caaaactgta cctcccaggt cattgtggat tcaagtaraa    1260
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aaccaaaatc ttattcttag gtgggaggca aagtaattta aaatgatttg gcagattgca    1440
gcaggatccc caagaaaagt ctagatagaa acagtgcaca aaagtctgtt tcgctgagca    1500
taaggtaaga atggagcagg ccttcagatg gagtttgaga ttggggtctt ggtccaacag    1560
gactaatttc caatgggtct tgtggctttt ccaagggctt acagcaaagc ttacctccca    1620
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ggatctctgc cctccagaga atggtctggg catggttttg gggagtgttt gtgaactrgc    1740
wgggyacaaa ttcctcctcg gggtcattgc ctccatactc tattttaca aaattctcat    1800
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caggctgggc acggtggctc acacttctaa tccccgcact ttgggaggca gaggcaggca    1980
gatcacctga ggtcaggagt tcgagaccag cctgaccaat atgatgaaac cccgtctcta    2040
ctaaaaatac aaaaattagc tggatgtggt ggcaggcacc tgtaatccca gctactcga    2099

<210> 1699
<211> 953
<212> DNA
<213> Homo sapiens

<400> 1699
ggcacgagag tgatttaacc ccccatgaag atgaggatct ggaaatataa gtaggatctg    60
aaactggtct gcagctgcat gcacagaaac accctgtaat gctgcctttg taataaggag    120
gaatccatac tctcaacagt cactccctga ctctcctctt cctcttcctc atctttctgt    180
gcatgtagtg gatttactac ggtttatttt cattctcatc agttaggagg aaatagaaga    240
aagagtaagt aactgaggtt gaatatgtta acttactggg ctgttttcat taagcaaata    300
aacaacaata aaaaaaatct caggctaaaa tgaaccatag gttccatttg tgaaatttga    360
tgatacagat aaccttaggt tttcactact atctctatgt atatttccta aatagcaata    420
tcagcaaaac ttcacaggca ttggggtggg taataatatt tctttaaaat actcaggaga    480
agtgaaagtc attcaaagga ctttaattgt catggagtca tccacttccc acttaacttt    540
ttctgcctca agtcccctct acgcagactg tctaaggcgt gatttaggtt tttggaagca    600
gctggtggca gcataaatct ggccagacaa ggagggtgct gtggaactgg cagtacaccc    660
tgagtgcccg aatgtcacat gaaacactct gcaatgaagc aagcagggtc tactaggtgc    720
cctgatcaat gtgaatatat gtaaggaaag gagaaaatgt tggttcgtat atttaatttta    780

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cagacataca attcaagtgt ggtttcaggc ccagcatggg tgatgttaga aaggccttgt    840
gcagtgctcc tccaagtggg gtctgaggca tctggcctgt ggtctcactg ctgacctact    900
gcatcaaaac aagggaatgc tgtttttcag tgtccctggt gattcttggt ata           953

<210> 1700
<211> 1559
<212> DNA
<213> Homo sapiens

<400> 1700
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cacccacacc atcatcctca tcttccttga ccttcttctt cttgaagagg gagctgcgtt    120
tgttgtctga ggccagcttt tccattttgt actcagacat cttctcccta agctccatct    180
gcatctcctt ctccttccgg ccaagttcct ttaggtccac attgtcagca aagaggctga    240
agatgggctt gctggtcccc ctcactttgc ttctgcaact ttccgcgggt gagctcagtg    300
tggtgttgca ggacagcaca gactgcatgt cagagctggg tcttgcctgg ctctgaggca    360
acaggcagcc acccaaggag gagctgctgt gtccactaag catggagact tggtcatccc    420
ccaggcagct agccgctggt actgccttca tgcttgcaac agacggtgag cgggacaaca    480
gcagcatttc attttgcttc tgagcaaggg tctcactgac tacattggca atccagttct    540
ggatactggc aatggaaatg gtgtctccag gccccactgg caggttaggc aggggtgtgg    600
tggggttgga ggttgaacac cccgctatgt tgcttgcagc ytgagacagg tgggagcggt    660
ggctctgggt gctcagtact gacgtcgtgt ccccatcagc gctgaytgag gggtctgcag    720
accagaacgc agacagggga atgctcccgc tggccgtgga gctgtccgcc tcccagcttg    780
ccatagactg gctctcctcc agcgtctgcc ggcttctctc cagcagctcc agcctccgtt    840
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tctcactgcc caccttcttc tggtgtttca gcttccaggc ctggtaggct gtcaggctga    960
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gggcagtgag cttgtccttg ttcctgctgc agaagttgta gaaggaactg gcctcagagc   1140
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cctcctctct cttgctcttg gcgtggtacc tccgggaagc ctccttctca atctccagca   1260
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tgccgtggtc cgggcggttc actccagctg ctgcttcagg acccagatgt cgtggctgct   1380
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agcgtcgctc tcctcctcct tctcctcctc ccttccccac ctccggtacc cttctgcttg   1500
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<210> 1701
<211> 608
<212> DNA
<213> Homo sapiens

<400> 1701
atgttgtgtg gaattgtgag cggataacaa tttcacacag gaaacagcta tgaccatgat     60
tacgccaagc tcgaaattac cctcactaaa gggaacaaaa gctggagctc caccgcggtg    120
gcggccgctc tagaactagt ggatcccccg ggctgcagga attcggcacg agcagctgca    180
gggaaggaaa gcttcccggg gagaggaggg aagtgttttt cttcccttcc tagtgacccc    240
catccacaag gtaggaactg cctctcctgg ttccatcatt ggagtccccc ccacaagctg    300
ccccagcatt caggctcctc ccaaggggcc tgacaggagc tatggagagc tgcggccctg    360
atctctttct tcacttctga atgagtccat ttctaccctt ttgggaccct tagagatgtt    420
tggaagagtt tggaggaggg gcactaaggt atgcacaacc agatgcttgc agagtgactg    480
ggtcagcccc agcttcaaag aggctatatc agtctatccc caaaactgaa gtccttgta    540
gattttttct ttctttaacc agtattcaca tatttgtccc tctagactac caacccttag    600
gcctcgag                                                             608

<210> 1702
<211> 1157
<212> DNA
<213> Homo sapiens

<400> 1702
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978

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ggcacgaggt tcatcctccc cctgtgcctg aacacatttc tgttctgctc actgaatgac      60
aggcagagaa agggagagaa atccccatag aaagaagagc atacagccaa gtttgcgttg     120
gctgtgcttt ctgctctcaa tattcttagc ctgtcttaac aatcattctt ctgggtgggc     180
atacatgctt ttctttctca tgaaaaactg ggcatctcag agcacggact aaaacccact     240
accaaggctg tgcctgcatc tgactcatca ccctcaaagc cctcctcatc ctcctttctc     300
attccctcat tttcctcact agccttggta gagcactttg cccagcatgg tgcttggctc     360
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acatcccagg ctaagttgct ctgtgtttcc acccagtgct cccacatcct gttttgctta     480
tggctggcac cttttaagga aaatctgttt acctatccat cttccacaac tctccattcc     540
cagcacacaa acactgtcag tcaccagcag ccttctctat ctttgtgtct ccatgcagta     600
gaatcaaaga aagaattggt tggattaatt catctatcac caagggcaca caagggagcc     660
acggagaatt agaaacaagc agcttcgagt cagacagctc tgaatgtaac ccctttttt      720
acattttcag gtagaaaatc acttaaacct ttagattttc aatcacctca tgtgtgagtg     780
atgtcaatca aggaaagtga ctgagacaag tctcagtcat tttaggggtt tatttgccta     840
agttaaggat acccaggctg ggcgcggtgg tcatgcctg taatcccagc actttgggag      900
gctgaggcgg gcggatcacc tgagatcagg agttccaagc caaccaggtc aacatggtga     960
aacccccgttt ctactaaaac tacaaaaatt agccaggcat ggtggtggac gcctgtaatc    1020
ccaactactt gggaggctga ggcaggagaa tcactggaac cagggaggtg gagattgcag     1080
tgagccaaga tcatgccact gcactccagc ctgggcgaca gaggaaggct ccgtctccaa     1140
aaaaaaaaaa aaaaaaa                                                     1157

<210> 1703
<211> 742
<212> DNA
<213> Homo sapiens

<400> 1703
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cagtaagtat agttacaata attttaatgt gtgcacttaa taaaaataca taaataagga     120
caatatcctt tccatttaca tttttatatat ttatgttttt tcatgttcta tttagtgtct     180
tttttgtttc aacttgaaga cctgtattta gcaaatttt tttgtggtag gacaggcgta      240
taatctttac ctctccattt ctgaatgtca cttttgtgga gtgaagtact cttggttgac     300
agacttattt tatttcagta ctgtgaatac atcatccatt atttctttcc tgcaagattt     360
ctgctgacag aatactgata ttttctgca gcttcccgta tatgtgatat ttcactttc      420
ttctgctcct ttcaaaaata tcagtttgac tttcatgttg gataattaga ttataatgtg     480
tctcagcaca gatctcaaag tgttcagctt cttttggggtt atttgagcag catggatatg     540
gatgtttatt ttcctttcta gatttgggga attttatgtt attagttatt taaataagat     600
tttcttcccg ttttccctct ctgctccttc tagaacttcc ataatataga tattgtttca     660
cttgatggtg tgccgtaaag caagtaacct ttcttcattc tttttctttt ttcctctgat     720
tagataattc aaataatgtg cc                                               742

<210> 1704
<211> 303
<212> DNA
<213> Homo sapiens

<400> 1704
ggcacgagaa aatttccata taaagaaggg tctggtgtag aaatatggtg aagggttgca       60
agaggttgct aaaggttgtt aacttgatgt ttcatttaca aaataaacac tctgtttata     120
cttagtgtat tacactttcg tattgcttgc cctgggaaat atgccagggt tggctgtgac     180
tagcccaact tggggttgtta ggttcactaa caatccagtc actgcggcca gcaggatgga     240
ccatgctgct tggttagtac tgatctcagg ctcatccctg gaactgagac tgaggtcagc     300
ccc                                                                    303

<210> 1705
<211> 1162
<212> DNA
<213> Homo sapiens

<400> 1705
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cctggaatcc cagcactttt tgggaggcgg aggtgggcag atcccttgag gtcaggagtt   120
cgagaccagc ctggccaaca tggcgaaacc ccgtctctac taaaaataca gaaattagcc   180
agccgtggtg tcaggtacct gttgtcctgg ctactcggga ggctgaggca ggagaatcac   240
ttgaacccgg aaggcggaga ttgcagtgag ccaagatcat gctgcagtac tccagcctgg   300
gtgacagagt gagactctgt ctcaaaaaaa taaggaaaaa gaaaggaag gaaagagccc     360
acctcgctgg tttatgagcc tcaggccagt aactcaaact acgtttggag actgtggctc   420
tgtttctagc cacaggggaa aaaaacctat gaacaaacag gcacagcccc tgcctccacg   480
aagtgatgac ttcatgccgc agacagcgaa ccctcacctc caacagatg cctcagtgac     540
tgcgggggaa aagccacgaa acagagggcc agatgttgag actgaaccat tcagggcctg   600
agctgtctgg aaggccgggg caggtccctg aggtggtgag ttgggaaaga gtggaacatt   660
ccagaaagca agagcctcag gtatgagtgc tctgagctcc aggggttcat cttgtcctct   720
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cacacacaga gttactgtca ttaccaacca gcgactccag tcctagggat ctaccaaaag   840
aactgaaaac aggcactcgg caaacacttg cacacacgtg catagcagca tgagtcacgg   900
cagccgaaag gcgcaaacaa ctcgatagcc atcaatagat gaatggataa acaaattgtg   960
gccgggcaca gtggctcacg cctggaatcc cagcactttg ggaggctgag gtaggaagat  1020
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aaaaaatttt tttttaatta gctgggcatg gtggcacact tgtagtctcg gtggctcagg  1140
agactgaggg aggaggatct ct                                           1162

<210> 1706
<211> 759
<212> DNA
<213> Homo sapiens

<400> 1706
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gttgcccagg ctggagtgca gtggtgcaat cttggctcac tgcaacctct gcctcccggg   120
ttcaagtgtt tctcctgcct caacctcccc agtagctggg actacatgca cgtgccatca   180
cgcccagcta gttttgtat tttagtaga dacagggttt taccatgttg gccaggctgg     240
tcttgaactc ctgacctcag gtgatccacc ctcctcggcc tcccaaagtg ctgggattac   300
ttttttcttt atttattttg gcttctgctt ttcacatgag gggctttct ccaatatctg     360
atgatccttc attgtccatt catcttcaca agtaaggcac caaaatgcta actggaaatc   420
acaaaatctc tgtatgccta ggcaagcttg tgaactaatg aagcatcact gcaggatggg   480
gaagctaggt gttccactgg agcaggggtc cccagagttc agtatctgag atggtttctc   540
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catcttcaga gctacctgat attttcgatt cctgatcctt tctgaagcct acctgagtct   660
tctgaggttc tgtggaataa attagtttgc tccttggccc taccctaact ccacacacac   720
cgtgcccaca tttcagcttt ctcttgtcct cgtgccgaa                           759

<210> 1707
<211> 933
<212> DNA
<213> Homo sapiens

<400> 1707
cggcacgagc tcgtgccgac tgtaatggtc ccgtcacact tgtctgatga ggatctgttg    60
gttgactttg acagtgataa acgaacacag cctatctggg tgttttttgc acttatagtt   120
tggggggtttg aagtactggc tagaagctgg cggggtgtgt gtgtgcaggt gtgcgagtgc   180
atgtgcaacg tgtgcgtgca agtgtgagtc tgcacttgtg tgcaagagaa tgtgtgtgtg   240
tgtgtgtttg gagatttgga cttgaaaatt ctagctcagg tctttggggt agtgtttgac   300
ctgaactctg aaaggcaagg gtcccagact ttcctgggat gatgggaact gggcacccca   360
atgagctcgg ttgtgagtag acggggtggg ccaccgaaga gaagacagag tgggcctgta   420
gggccagccc gaggtaccca cagtggaggg tctacaggct gatttgggag gtggtggttt   480
atacctgtag tcaccttcta tcttagttag gaattcacct tcacacttcc agaaactgcc   540
aagaagaatg ccgccgctca ggtttatctg gtagaataag ctgtttgaac aaagatctgg   600
aggttgcaca atcctgtgtc attctggatt tatcttgggg tcgggagtca acgatacttc   660
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gtgtctaaat gcactttgaa atcctaggat gaaaaagcca ggccctgtct tttttccttg   780
tctaagcacc atccttgctt aggagagaca cggctgtggc tctcaggctg tggggcaatg   840
ttctgcttat aatgtttcaa gaggttcaaa gcgtgcaggc cccatgctcc gtgagagcct   900
```

```
tgacctgggt cagcaggggc ggctgggctt gac                              933
```

<210> 1708
<211> 655
<212> DNA
<213> Homo sapiens

<400> 1708
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cccccgggct gcaggaattc ggcacgagaa gatacgacga gattaaaaat tttgcctaag    60
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gatatgcaaa taatcctgat ttatagttat ttggtcagag ggatggattg tatattttat   180
gaatgatttc agaccctctt ctactccctc ttactttctt tctgtttata tcactgtcaa   240
ttaactttcc agtagtagag gctcagagat ggtaaaacta ccactaaatt tatagaaagt   300
tgtatgaatt tctttaagaa gtgggaatac ttctcctttc ctcagttttt tcctatttat   360
ggtcattgca gtaatttcta tcatcctttg cagctttgaa atcacttctt cacatgtaaa   420
cagctcaccc tggtgttgcc atggagattt atatcaatgc catgagccag ggcctaattt   480
gcgcattctg ctgattaaca ggagtatttg ctaatccctg ccaagctctc tcatccactg   540
ccatgactaa tctcaccggt tggcgatgcg tggaattcat gaatgctaga aacccatcat   600
cttaggttat ttaacacttc aattctgttc agtaacaact taattaagtc tcgag        655
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<210> 1709
<211> 366
<212> DNA
<213> Homo sapiens

<400> 1709
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ggcacgaggt ttaacacctc gcagtaaggg attcttcaca tcccagaagt agctaccctg    60
catcttaaac agtatgctag gttagattct tgcccgtttg ctgttcctga taatgccctt   120
taactcacac aactgagctg ttgttagtta ggatctacgg ccacagaaat agtatgtctg   180
aaataaacat aaatatgagt aaaatccagg cataccccct aaatcatgcc cttcactttc   240
ttcctgtttg taaatctttt gtaagccttc aacttttttt cttttttaagc ttgtagccat   300
ttctttttga atgactctta gcttactgtg tttccagggg ttgaggagcc atgtatctgt   360
gggata                                                             366
```

<210> 1710
<211> 621
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (616)
<223> n equals a,t,g, or c

<400> 1710
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attcggcacg agggaggaaa gagggtggaa tctggacagt atgaaggatt tgtattgtac    60
ctgtaatgtt tgatgtctga agctgggtgg tgggcatggc tgtttgttat tctccatcct   120
tttggtatgc ctgatacatt tcataataat tttaaaaagg acaagactac tgcagagaaa   180
tgcatagagt gagctctgtt tgggtttttta aaatgattcc tacatctatg cttgcagatg   240
taagcaccag ccctggaaaa cattgcaagg gattcttagt aggcccaagc tttgggaaag   300
ggccaagggg gctggggagt tgattaggag gggatacatg cttttttcctg ctgccttttg   360
aattttgtac cacacgtagt attacttatt aattaaaaaa taatctgaac tagccaggcg   420
tggtggcaca tacctagtct cagttacttg gaaggctgag gcaggaggat cacttgagcc   480
caggtggttg cggccagcct gggcaacata gtgagaccct gtctctttag aaaaaacagg   540
ccaggcatgg tggctcacac ctgtaatccc agcactttgg gaggctgagg tgggtggatc   600
acctgaggtc gggagntcga g                                             621
```

<210> 1711
<211> 1611
<212> DNA
<213> Homo sapiens

<400> 1711

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agtacaattc cttttcttgc acagacattt tcccaagtca gtacatctgg gataatagtt      60
ctcagagtgg ctgtatatta tattcacatg aagagatttt aaaagttata ccccatgttc     120
atcgctttat gttcaaaagt gtgtgtgtgt gtgaatgcat atgtctgtgt acacacatat     180
gtagtattta tgcctggcat gtatacaata tgggtccata tatgcaactg agcaggtatt     240
ttagaacatc tgatgacctt gtcatttcaa gaactgtggc cacagattga gaaataaagc     300
acccttttcag tagtctgagt atttctcaac aaaagtagag acttgcccat ccttagtcat     360
ttctatggra ggagtggcct ctcatttat gctttttatag ggacgtctat tcccagccca     420
tagtttatga gcaacattct stcagcaggc wkgaatagtg gctcsctata attaattccc     480
ttcttgctcc cccacctctg agagtgagaa ataaaagggc attaaaggga atgtagttac     540
aacccacaaa gggaccacat aaaatgtcac cttttggctc aacacattgt tcccttcgtg     600
actcctagtc ctgaatttcc atctcacagg gcaggcagag tgtattgtca gctgagaccc     660
aagagagaca cattggcagt caatctgcat gatatggtag gggtattagt taaaactta      720
ctgaaagtta agatctgtgt caaaggtttt tccttgtcct atgtgcatta catggaagac     780
agaagaaaac aaggaaaaga gatgaattgc tgttgcaatt taaagtatgg gggcagagag     840
ttgagtgtga gctgcagaat ttctatgtga caacatagaa tagtggtgaa gttacttaac     900
ttttgtgggc ttcagtcctc ctgcctccct ttgtagcatt agcatcataa tacgtgtctc     960
ccaatgtttc agggaagagt aagtgggttt agatatatgt agtgaatacc acagtacctg    1020
acatatagtc agttctcagt gctgataatc atataaattg aaagcaatta aaacacccc     1080
atttatcttc ccatgcataa tttataaagc acattcacat catgcaaatt catcctcaca    1140
acactcaaca ttcaattaag ataagcatgc actcttgttt cccttgcac aacttttgca     1200
agttgaatgg ctggtttggt tagattcaat ccagtgttct ttccattaga gcagctgcca    1260
cctagagaag aggacaatgt ttctcccagc cattgaacat gctgcatgtc tctgttgagg    1320
ggccaccatc aaaactcagg ccctgctgtt ctactctagg aggacagatg gtcttaagga    1380
atataggggac cttctagacc ggaatcctca caccaaacct ttagtctatg gtaatcactg    1440
tttacaaaag tttaatcttg ttcccttctt taaaagtttc agagcattgg tgtttattga    1500
ctttttttgtt tctttaaaaa agaggacaag ccaggcacgg tggctcacgc ttgtaatccc    1560
agcactttgg gaggctgagg cgggcagatc accggaggtc aggagctcga g             1611
```

<210> 1712
<211> 1267
<212> DNA
<213> Homo sapiens

<400> 1712

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tgcaggaatt cggcacgagc tcactttgac catgcgatcc cttggcctga gatgcgcttt      60
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cctgtgaagt cttccctgac tcccccagca gaattaactg cccctctct tgggcttctg      180
gctccactca gtttgtcaca ggcctgatga gcaaggatat cttgatgaag gtgataactg     240
gccgaaaagc agttggggcg cccaatggcg cagcttcaga agcaccttct gtgttttttgg     300
aactgttggc agcatcccaa ggtgaaatgg tagaagcata tggcatggga gaatggaatg     360
gggaaggata gggagtggag gttcacagtc cattccaagg ctgtatgtca agatgacagg     420
aaacacatat gcagcttgtc tcaaagttgt atcttgagac tggggagaaa gaaggaaaga     480
aaacaaggtt ttaaaatgca gtttgaagcc aagctgcctg cttacagtca gactgcctgg     540
attcaaatgg ctaatttcta ccacttcaac tgactagctc tgtggaacat tccagaattt     600
ctctattctt ctgtttcctc tttttttcccc cttaatttac attttttgtg gggggggcagg     660
taagagacag gatatcgcta tgttgcccag gcacaccttg aactcctggg cttaaacaat     720
cctcccaccc caggcttcca agtagctgag actacaggca cctgccacca cccccggctg     780
gtttcctcat ctttgaaaca ggaagaaaaa caatagcaac cactgttgga gttttaggag     840
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gatcaaaatg tcatcatcat tgctgacaag agctagactg gaggatgtgg ttgaagtgaa     960
aatactttac ccccagtcac taacacagca actgcagaca gcccattacc agggtacagg    1020
gcggtccaac ccagcacccc accttctcag aaagttatca gtcagagaaa tcctcctcct    1080
gctctgggga aaaggagaat gaaagctaga tagacatgtt cctccacact tggccccgct    1140
ggggaatgga ataggaatct cctcctgtcc ttgaaaatat gagaagcaaa aataagtgat    1200
tctctcaata ccattttatg ggctcttgag gttgttatga gattaaggaa aaacacagct    1260
aaagtat                                                             1267
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<210> 1713
<211> 1341

<400> 1713
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gcttgtraga taggtctctt aaagacagca taaaaataga tcttggttct ttatccatct     120
tgccactctg ttttttgacc agggcattta gctcatttac atttaaggtt agcattgtta     180
tatgtgaatt tratcctgtc atcataatgc tagctggtta ttttgcagac ttgtttatgt     240
ggttgcctca tagtgtaact tgtctgtgta cttcagtgtg tttttgttgt ggctggtaat     300
agtttttct ttccatattt agcacttcct tcaaaggctc ttgcaaagta ggcctggttg     360
tgatgaattt cctcatcatt tgcttgtctg aaaagggtct tatttctcat tcgcttttga     420
agtttagttt gsccagatat gaaattaagg gttggaaatt catttctttta ataatgtcaa     480
atattggccc ccagtttctt ctggcctgta gggtttctgc tgagaggtcc actgttagtc     540
tgatggaatt ccctttgtag atgacctgac ctttctctct ggttgccctt aacatttttt     600
ctttcatttt daccttggat aatctgatta ttacgtgttt tggggttgat cttcttgttt     660
agtatattac tggtgttctc tgcagtttct gaatttgaat gttggcccac ttttctaggt     720
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gttcctctcc aaactggaaa atgctatggt tctggcaggc ttgtaaaggt gctgtgctga    1080
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ttctgttact ttctctcaaa caaatggagt ctctctctct ctgtgttctt agctgcctgg    1200
agttggcagt ggagtgacac aagcacccct atggctactg ccactagggc ggcactacat    1260
cagatctgaa gacagcacag tgctgggtct cacccatggc ctgctgcaac cactcctggc    1320
tactgcctat atttgctcga g                                             1341
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<210> 1714
<211> 372
<212> DNA
<213> Homo sapiens

<400> 1714
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ggcacaggaa aggaagaaga tgactgtccc ctaaatcaaa gcccaccaca gaggacctga      60
gcaggtccca ctgttgcaga ctgcctgctc tcaccagcta ctgggcatcg tctgactcag     120
cttgggaggg cccaagtgaa tggtcatcag attgagcaac tgggcaccaa catgtgtttc     180
ctgagggcct gctggtggcc agctctgtgc ttgaccatac agcaggaggg actggaaaag     240
gggacaatac agtgcctgtg cttggggagc tctgggaaca aaagcccacc cattaaatag     300
tataataccc ccaggtgttt ctggcagggg agatgggaaa agtagccatt ttgaaaaaca     360
gccagctggg gg                                                        372
```

<210> 1715
<211> 745
<212> DNA
<213> Homo sapiens

<400> 1715
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ggcacgagga cacaaaaagc attaaagtat taagtaatgg caactggaac tttaacaacc      60
cttctgtcct tctgtagtct gttgatatag attggatgtg tgtcctctgc agatctcatg     120
ttggaatgtg atccccattg ttggagctgg ggcctaatgg gaagtattgg ttcattgggg     180
cacatcccac ataaatcgct tagtgacatc cccttggtga taagtgagtt ccttctttga     240
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ccttctcacc atatatcatg gtagttccca tttgccttcc accatgattg taagtttcct     360
aaggcctcac caggaacagg tgccagcacc atgcttcctg catagttgtt cactcttatt     420
cttcagaatg gctactgcaa atattgtcca gatgtcaaag ctccctactc cactctgtgc     480
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ccctcctaca ctcaacttgt taactctttg ctcccgatgc aaactcactt gtcctttctg      540
tcaccgtgga tgtctctctc ctcccagtgc agttaccctc ctgtgatttg gtttccattt      600
cctttccttt cattaggaac tttagatcat tcatttaaac tctcctctgt gtccttaagt      660
ttttccacta gtcattggta tcgacatttt aacatgctca agtctcctct atttctccct      720
ccctccaaaa aaaaaaaaaa aaaaa                                             745


<210> 1716
<211> 1203
<212> DNA
<213> Homo sapiens

<400> 1716
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agcctcggca atggctggcg cccctccccc agcctcactg ctgccttgca gtttgatctc      120
agactgctgt gctagtaatg agcaaggctc cgtgggtgta ggaccctcca agccatgtgc      180
aggatataat ctcctggtgt gccgtttgct aagaccgttg gaaaagctca gtattagggt      240
gggagtgacc cgattttcca ggtgctgtca cccctttctt tgactaggaa aaggaattcc      300
ctgacccctt gcacttccca ggtgagacaa tgcctcgccc tgcttcggct catgctcggt      360
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acttgtgctg atgactctgc gatgtgtatt ccaaacatat gtatggaata gttccatttt      600
taaaagtact attcaaacag cattgtcctc actctcaagt ttgtcatctg aattaaactt      660
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aaagcataaa catgagccct taaatatcta aataactggg gtcttttaat aattcactgt      840
atcaaaccct aaaaaaattt gattaatccc aagaaatctt cttctgattg agtaaatcaa      900
ataaatattt tcaccatgaa aaagatcatc ctacaatatc tatttgtgag aagtttagtg      960
ctttagatat tagggccact ctacttaggg aaagatatat ttcttttct tttttttttcc     1020
ttttttttta ttttttttgag acagagtttc actcttttca cccaggctgg agtgcagtgg     1080
cgcaatctca gctcaccaca atctctgact tccagattca agtgattctc atgcgccagc     1140
ctcccgagta gctgaggcta caggcatgtg ccaccaggcc caactaattt tttcttgggg     1200
ccg                                                                   1203


<210> 1717
<211> 722
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (598)
<223> n equals a,t,g, or c

<400> 1717
gaatttctgg agtttcagga gctttatcct aaggtggctg tgataacctg gattgttgtg       60
taaattgcac atttggggct tggcaagtgg cagatgggag ttctggctgt tttattacca      120
gtaactggga catgggcttg ggttcgagga ggccacgtgg ctcctgacac agccttaagg      180
atctgaggtg gcccctgccc tgggcacctg gggtgggaag ggaggtgcag ggaacaggga      240
gacttatttt tcactgtgat cttttcgaac cattgaatg tattatacct tgtgtgtttt       300
attcaaaaat gggtagattt gttaaacaaa acctaaaaaa aatatgagca ggagtgacag      360
aaaacagaga ccactgagtc tgagtccagg ttggcccctc ccggtgtaac cttgatgcaa      420
cattgagcag gcctgagctg gggtgacctc actgacagct aggagaggaa tgagactctc      480
ctctgggtca ctcggtggta ggggtgagct ggggtggcct cactgaccgc taggagagga      540
atgagactct cctccgggtc gcttggtgta ggggttcagt gggaatgggt ttggggcntc      600
tgacatatct ggctcaggaa gccagggtaa atttcagcct taaggagaa aggctcgtgt       660
cagcccccac agtctgcagg ggctgtccct cctgggctcc tctccacccc tggtgatgtg      720
ac                                                                     722


<210> 1718
<211> 252
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984

<212> DNA
<213> Homo sapiens

<400> 1718
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ggcacgagtt tgagccacat gaaagtaaag ctgccttttg tgtctgtgtc actctgtgtg    60
tgtgactgtg taaggggtag cacacttaca tggaacaggt tactgcgtgt gggagaaggc   120
tcaggaaggt attcatattt atacagacgg aaagctgggt ggggttgcgg acacactccc   180
atagagaagg tggtgtgagc ttgtctggca ggccgtgaat aactttcata tggctcaaaa   240
aaaaaaaaaa aa                                                        252
```

<210> 1719
<211> 1195
<212> DNA
<213> Homo sapiens

<400> 1719
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ggcacgagcg accactcaca ggtgccaggg ctctgacatc tcgccaggca tagctaaagg    60
ttatactcat ctatcccctt ctgcttctgt tacttttggt gtgtggaaca agacccatgg   120
gagctggtgc ctttggctac ttggccttgc cttgtctggt ttgcttgaca tatctgttac   180
ctaccttatc tagaaaccat tctcagatgg gatgataaat taagagaact tacactcaca   240
gaaactccaa aacaattcca actgggcttt tcttcatgtt gaatcataat atactgtaat   300
gatttactaa tgaaatacca ttttgtttat caaattaaat gagcaaattt aaaatactga   360
tagccaagtg tggtggctca tgcctgtaat ccccagcact ttgtgaaggt gaggcaggag   420
gatcacttga gcccaggagt tcgagaccag cctgggtgac atagtgagac accatctcta   480
caaaaaacat aaaattagcc aggtgtggta gcatgcaact acagtcccag ctactcagga   540
gactgaggta ggaggaccac ttaagcctgg gagatggagg ctgcagtgag gtgtgatcat   600
gccactgcac tccagcccag tgaaagagca agaccctgtc tcacaaaaat aaaataaaat   660
aattgatatt acccttttata catggttgtt gaaatagggt ggtgcccttt tggaaaatca   720
cttgacagta tatccagaaa tgctgatatg ttttcacaca aaaactttgt tttactttca   780
gaaatttatc ctaaatcttg gccagacgca gtggctcatg tctgtaatcc cagaactttg   840
ggaggctgag gcaggcgaat ctcttgaagc caggagttcc agacaaattt agcccatgtg   900
gcaaaaacct gtctctacta caaatacaaa aattagccgg gcatggtggt acatgcctgt   960
aatctcagcc actcgggagg ctgaggcatg agaatcgctt gaacctggga ggcagaggtt  1020
tcagtgagcc aagatcacac cactgtactt cagactgggt gacagagtga gactctgtct  1080
caaaaaaaaa aaatcttaaa tctagaaaac tgtagatgtg ccaggcatgg tggatcacgc  1140
ctgtaatccc agcactttgg gaagctgagg tgagtggatc atttgaggtc aggag        1195
```

<210> 1720
<211> 1347
<212> DNA
<213> Homo sapiens

<400> 1720
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ggcacgagaa attttcagga tgccagcttc ttagaaagca ggctctttcc cagtgggttt    60
cttacaatga aaacaaccaa aatataacat agagctcatt aaccttgcca gccactgtgc   120
taaattattt gtatttattt tattaataat aattatttct ttcatcttaa aaataacctt   180
taacttatta agaatgcatg cttattggat attctttaga aaatatagtt caacaaattc   240
agccataatt tcacccccag agagtgtcat tcccaacgct ctggtttagg atggctttgg   300
aagctggagc cctatacatt gggtggatat taggccaggc tttttttttt tttttttttt   360
cagaagtttc ccttccaaaa tgtgggaagg tctagtagtt tgcttggaga gaatcttttc   420
tgttttcttc tctctcaagc gcttgagtat aagacctagt tattgcctga tttgaaaaac   480
tgtatttgat taaaaagccc tcaaaacgtg gtcagttcag atgcaactgt gggaaagaaa   540
aatgatattt ttctatttct gagaagcatg agttgagggc tcaacacacg gtgaatgccc   600
aggagccgat gttaaacaac tgaaaagatc aattgaaaag aaggatcccc aaacacaatt   660
tcccctgact taatatttca actaatgaag tcaaccctga ctgagcacag gttacatgcc   720
aggcacaggg agggcgctgg aggctgctgc atggcatcta cctgtgtgtg tgtgtgttgg   780
gaacacatat gagttcatgt gcagcggtgt gtgatgtgtg tgtctgagta tgtgtgccag   840
tgtgacttgt gtgtgcgaat gtgtgttcat gtggttgaat gtatgtgtgt gtgcaagtgt   900
gtgaggtgat tgtatgagtg tgttttcacg catgtgggtg tgtgactgtg agtgggtatg   960
tgtgtgtgtg tgtgtaggag gagaggagga gatgcaaagg gaaatagaca ctgctatggg  1020
agcccagggg gcttgccagg gagagtgcac gagacctgca catagcaccc tcttcctttg  1080
```

```
atttgcaaag ccctctggac ctcccttcct gcctctttc ctcctctatt gctctaaatt      1140
ctgaaaccag aattgcttgg ggttcctcat acaacctctt gacaatccca cccttccaaa      1200
ggaggataaa ctgactttca aagccagtat ccccaatctc aagtcctggt ctctcaactg      1260
gacttggggc aaaatggtta cagagcatgg taggcagcct tcaagatggc tgtctctgaa      1320
attcaggctc ttgtgggatt ccttccc                                          1347
```

<210> 1721
<211> 794
<212> DNA
<213> Homo sapiens

<400> 1721
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ggcacgagaa aagtttcagt tctgggatg attttgttcc tattcttgat accaagcgat       60
aaaatcaggc tgctaagaga aaatgaaaag gaaatagcca gctagtgtca ttgaatcata      120
tcccgaggca gtgagtttct tccagcacat tttggcctca gtcctgaggc tggaccttaa      180
ctagtgaact gcaaactcac tcaattatgc agtctgcttg gtgcgatgga agtgaaaatg      240
tcctagagag ttgggtgcta gtatgcattt tgatagtctc ctagcctgtg acccaggaca      300
gattccttgc atgcatagga gtttgtcacc atgcaaaatc tggctgttgt cttctgaga       360
acatggggga gctggactgt caacaatgag ccatatcagg ctgaaactgg gaaactgttc      420
tgctccttca gagtcaagac aagccagaat gagtgtcaaa tttccttcct ctgtgcttcc      480
tcagatgtgg tcagattcat agccttcagt ctattctaat tggtagctag cctggtgtgg      540
acttttgacc acccaccaat caaccaactc ccaccctcac catttactgc acgagtaaag      600
ccacgcttcc taggaactac cattggtaga gatgttactg agtcataggc cctgagatag      660
gaatgatcta taaaggccat ccacgccagt tcttgaaccc ttctacaaca gtccagactc      720
atctttgccc aatctctcct ctgacaatga aagccttagg accaaaaaaa aaaaaaaaaa      780
aaaaaaaaaa aaaa                                                        794
```

<210> 1722
<211> 1184
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (467)
<223> n equals a,t,g, or c

<400> 1722
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ggcacgagca gaggctgatt ctctgtaatc ctaccctccc cttctcccca tcagggccct       60
tcttagcact ctgggtggtt gctccaacca tgcacctgga agcttgggct tgggttacaa      120
tgctctgttt atgtgtttgt ctcccctgat tgcctgccag tgattcttcc ttctcatatc      180
tcagcactta acatagttct tgawatatat taggtgataa aaattgtctc ttcttttagc      240
actggagcca tgagataccc ctgagaagtg gtgagcttgt ggcgtgaaga gctgggtgac      300
ctcctcttcc ttttggtggc ctgagccaga gatgtcactt cctcacctgc tctttttctgc     360
tttcatgtct caagctgcct gggggcttct ttttttaggt ctcttacact cgactaatct      420
gcgatgggcc tagaacccac aatggggaaa ggacagactc ttcaatncgc aggttgggaa      480
acaaaatatt cacctgcaga agaattaaat tggagccttg tctcacatct tatataaaaa      540
tcaactgaaa atggattaag gactttaaca taagatgtga aactagaaga aaacataggg      600
gaaaagcttc ttgacattgg tctgggcaat gatttttttt tttttaata tatgatccca      660
aagctcaaga aaaaaaaata ggtgaatggg gccaggcacg gtggctcatg cctgtaatcc      720
cagcactttg ggagaccaag gcgggcagat cacttgaggt caggagttca agaccagcct      780
ggccaacatg gtgaaacctc gtctctacta aaaatacaaa aactagccag gcatggtggt      840
gggcacctgc aatcccagct ccttgggagc ctgaggcaga gaatcactt gaacctggga       900
ggcagaggtg gcagtgagcc aagatcgtac cactgcactc ctgcctgggc aacagagtga      960
gcttcgtctc aaataaataa ataaataaat aaataaaaca aaaatacaaa aattagccag     1020
gcatggtagt gcatgactgt aatcccagct attcggtagg ctgaggtggg aggatcaact     1080
gagcccagga ggcagaggtt gcagtgagcc aagatcaagc tattgtattc cagcctgggt     1140
gacagagtga gacactgtct caaaaaaaaa aaaaaaact cgag                       1184
```

<210> 1723
<211> 450
```

986

<212> DNA
<213> Homo sapiens

<400> 1723
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ggcacgagac  acaactggga  tccaagtgta  tgcccttgga  cacgttgctt  aacctctctg    60
tgcatcagtt  gggtgataat  atctactcct  ggcacatttt  cagcgttggc  tgagttacat   120
gtacagtgct  taggccacct  gggggagagt  aagagtggga  tacgtgagga  tgtggagtct   180
gttgcatttc  tgtctgctgc  tggcatcctt  cttgtcttgt  tttgagttgc  tcgcctctgt   240
ctgctcccta  gggcgtagat  ttgaggaata  ttcctggttc  ttcccaggca  gcaggggctc   300
aggctgtgct  ggagtcagct  aggctaaggg  gctggtctgg  catccgcgtt  gtcctgtcac   360
ctccttggtg  ttttctccag  gcctggatct  gtgctgtgtg  ggcacctgta  ttcctccctc   420
ctgccctcac  tgattctcca  tacctttctt                                       450
```

<210> 1724
<211> 1375
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (825)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1346)
<223> n equals a,t,g, or c

<400> 1724
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gaattcggca  cgagcaacca  ttagacattg  aagtgatgaa  tcgttatccg  tgctgcactt    60
agaccgaggc  tatccagtag  tttatttatg  gtggcagtgt  atctcaccaa  aacactatgc   120
tttccagctt  ccctttcagc  gacccatgtt  ctttcattgc  ttctggtcag  tgaaatctaa   180
gcaagtattt  tttgggtgag  tcttccagga  aagtgtttag  gggtgtggtt  aattttttgtt   240
ctgccaggaa  aatgagtggg  atagctggaa  tcatgatagt  catggcatct  ctgttaatgt   300
ttttggtgcc  tttgaacaga  ataggaagaa  tcccccatct  ttgcagatga  gttagaaaat   360
ttcctcctct  gggtagaagg  aatccctcag  aatacacagc  ccccactcac  ttcttggtca   420
ggtgtcttca  cagtaaataa  actacacaac  tgtatggggt  ggcctggaca  gccatattgg   480
actatgaagc  aggaaaggaa  gccatgctct  aaagatagca  aacccaagga  gaaaagcagc   540
ctggtccttg  ctgaccatgg  atgtgccata  tcagccctgc  attgactact  tccagacttc   600
ctttatgtga  gagaaaaata  acatttatatt  tgttactgtt  atttctgatt  tattttacta   660
gcagctaatt  gcttgtwaag  ttaagactac  atgatatgat  ttgagaattg  ctatcattaa   720
ttaattaagc  aattgttcct  tgtgaattct  gtatcagaaa  ttctatgatg  tactagagat   780
aaagacagaa  tttgcaatct  aggatgtgaa  agacagatgt  gtacncatac  aggtaattat   840
agcataatgt  catatgcttg  ttcagtttgc  atgctggata  gagacatcta  ggcaaaaggt   900
tagtggggac  tgtgctttga  tagactgcat  gcmcccagar  ggaaacatat  cctaattcat   960
ctccacaaac  ggggtacctc  tttttaaaaa  tgcttcaacc  aataataatg  ctttattatc  1020
atttagttca  gtgattacca  aacttatttt  agcagccatt  agccttcttt  gaaagaataa  1080
taatacagaa  acacaactta  ttagttcaga  tgttttggag  agatctaact  cagattagat  1140
ctaaaagaga  atttgctggt  taatttaacc  acacttactg  taagagagtt  gggcacagcc  1200
tgttaaggga  gtacatagca  gggtttttag  aaaaagcttc  acagaggaag  tgatgcttga  1260
ggtgaatctt  gaaggatgat  tttaagaaaa  ggacaaaatg  ggaaacagca  tactatgctg  1320
aggaaagcgg  cacgagcggm  acgacngggg  gcccgtaccc  aatagccctt  tggtg         1375
```

<210> 1725
<211> 328
<212> DNA
<213> Homo sapiens

<400> 1725
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ggcacgagta  attttctcac  ttttgataga  ggcatgggta  cagagaagta  tttttttta    60
gtttaagtaa  acaacagaac  aagcattcat  atgagacaac  tgacacaaac  ctgagggaga   120
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987

```
cactaggggag tggaggggac tgtggtgcac tagagaccgt gtatcccttc ttaagggggaa      180
ccgtcccttc tcagctcagc tgactgttgc cttggaggaa ggcggagctg gtatttctgg      240
atcttcctat ttttcaaagg aagttaaaca tctggtgttt tatgtgaaat ctttccattt      300
tctaatatta cctgtttggt cgctgtgc                                           328


<210> 1726
<211> 649
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (567)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (588)
<223> n equals a,t,g, or c


<400> 1726
ggcacgagct gcccccaaca ccagtctgat gggattgtcc tgaggttgga ctccgttatt       60
ggaattctaa gccccttggg tggtttttwat gtgtagccag ggtcaagaac cctgcctgat      120
agagtcattt ggggcacacc tcagcacagg gcccagtaca taggaagccc ggggatgtta      180
gctggtgtga tggtggctgc tggtgtcggc tgatgtacag ctttgtgtga gaggacagct      240
tggggccgga atcctccccc atggctcctc tttgccaggg accctgtgcg agccccatgc      300
tgacgtccct acccgaattc tcctggaagt tcctcctgta gcctcctggg tccccaggtg      360
gctccctctg acctcactga tgatgcaggt gcccaggtgt gccgtttctg acgcagggca      420
gggccagggc ttatgcagtc gggtaatggg ctggaggcgg gccttagggt ggaagtcagt      480
gtttctgtcc cctgytgcag caagagcagg ataggacatc aggcccccccc cccccaatt      540
ccccaggggaa agaaaaccca accaatncca aacccagctc ccactttntc aaccacagtt      600
gcagagggcc ctgctgcctt ctgtgaaatg atggggctgg acggctcag                   649


<210> 1727
<211> 1521
<212> DNA
<213> Homo sapiens


<400> 1727
ggcacgagct ccacttgaat ttgcttaggg acctcttcct ccatttgact aaactcccag       60
tgccgtgcaa tggggtcact tcttgtcttt ccacggtcat cctatgcact ccttcacctc      120
atcggagtct gattccttat ctcatgctca gccttgtggc gggcacgtga caagcatcac      180
ctcctgaatt tctcatggca ccggcgcaag gtacaggctc ttgacaaccc tgtgttatgt      240
gtcaggaaac tgaaattgaa atgaattatc catggctaaa tgcattatcc atggctacca      300
gcagggaaat ggaaaatatt tgaaccccag aactgttgat cgagaattct ttcaagtttt      360
atatttggcc tcttctcctt aatttagata ttcagtccta tttccctgat gcctacaatg      420
tgccaaagtc gcttatactt ctttgccttt cgagttgctg ttttcttgtc tcaaaacatc      480
ctactcttga gttctttgtg cggttaatat tttgtcatcc tttagttctc agctgaagtg      540
tcatattctc aggtaggaat tttctaccca cttttccata agcagaatat ccttagtttc      600
tgtctgcttt cacagagtgc ttactgccta tttttaaatt tactacactc tataattatg      660
ttactgatct ggttactgtc acctgatata attatttaat gtgcctggct tagtgtatgt      720
agttgtgcag taaatattca ttgaatgaat aaacgttaaa ggttatgaaa ctgtgacgta      780
aaaatcttat gaataaaaaa tggaagatgg gaaaagtcag aaacagcttc attacatgtg      840
taaaacacaa accaattatg tccaaagaaa agcaaatatt atttccacag aattaataat      900
ttaatattat gtgaagtctg ggtcattgaa tacttgtaaa ttggcaattg attctcgata      960
tattccttta aagttataat cttcttgaag tttaagggaa gaaaggtgct atgagagggc     1020
acaatggatg ttgaataata aatttttaaa aacactttat tcttagaagt ttcactttgg     1080
tttatcttcc ttagttaaat ttcctttgta gcaaatgtgt gtacccttga tcacactgaa     1140
gaaaatttgg atgttgacag cacatggaag cattgttttc agatatcttc aacttagcaa     1200
cttttggatg tcaggctcca aaaacatcac aggagggaaa ataccctgac tttattgttt     1260
gatgaaaatt tgtggattgt gcaattattt tgggtttgta tgatttgctt ttatttactt     1320
```

988

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tatatattac atacagtata aaatgtacac tttatctact ttttataagt cacaattta        1380
tgggttttgc tttacttata gcgttttcct caagcaattc ttcagatact gagcatcaga       1440
aaccaagtat ttggaaactg agaaatgtga gctgaacagc tgagtgaatc agacagggcc       1500
ctaatgaaaa aaaaaaaaaa a                                                  1521

<210> 1728
<211> 653
<212> DNA
<213> Homo sapiens

<400> 1728
gacaaaatga ttatgccttt atgtgttgtg tgtatcgtac taaacccagt gctgtgcata         60
gaggaaattt tacagtctat agtgttacat aagtactggg gccttgcata aagtagatat        120
ctggtaatta tttgttgact actccatgtc tagtcaaatg gcactttaat tttatgtttt        180
ggaacagttc agtattaagg attagtaata ggaaaaagac ttaacatttt aattctgtga        240
atttaagtca ttgtcttctg aagatggagt actttaaaag ctccaaggag ttatctggaa        300
aaaaaatgta agcagctttc catcaaaaga cattatggtt aaggtttgta ctgtaggcct        360
ggtgtggtgg ctcacgcctg taatcccagc acattgggag actgagtcgg gtggatcacg        420
aggtcaggag atcgagacca tcctggacaa catggtgaaa ccccgtctct actaaaaata        480
acagaaattt gttgaatgtg gtggtgtgtg cctgtggtct cagctactca ggaggctgag        540
gcaggagaat tgcttgaatc caggaggtgg aggctgcagt gagccaagat ggcgctactg        600
cactctagcc tgggcgacag agtgagactc tgtcccaaaa aaaaaaaaaa aaa              653

<210> 1729
<211> 687
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (664)
<223> n equals a,t,g, or c

<400> 1729
ggcacgagag ccgaggcctg aattgtgcaa agagtcaaac aggaatgcaa tcattcaaaa         60
taaaacagtg tagaagtaca tttgaatgaa acattatggg aataacaccg aaaaaataca        120
aatattttct tgagtctcat gtctttggct cgtgacctgc ggcatcagct ggccaaagag        180
gtcaatcact ggcatgtcaa tcacgcaggc ctctggccat ggtaacagca gtctgtcagc        240
cagtcctcac tgctcctgtc tttgctctcc tgctgccagc tgtggcccga agccgtctg         300
tcggagcagc cttggagcca gggaaaagga accgtagggt gaagagaggc tgtggggtgc        360
catttatgta gaaactgggc gcctgacttg gctctttcc caagctgtcc acctaaaaa         420
tgctatgtcg aatatcacca atgatcagaa ataacagggc agacttcgac tctaaactaa        480
agcttgcaga aagtttgatg tatgtgtgtg actatgctat ggatataaag cctgttatca        540
ttttgaaaag ggggaacttt gtaaggtaag taactttcca aataagtgat taaaatgttg        600
ataagctttt gacacatgtg gaataatttt ttgatagata gttggcctga atttccctta        660
tttntcttgg gaaaaacaaa gcggatt                                             687

<210> 1730
<211> 548
<212> DNA
<213> Homo sapiens

<400> 1730
ggcacgagcg gcacgagggc gtggtcctaa gcagcacagg atcccccctcg gggacattcg        60
cgggccatcc tcctgctccg gttctccctg gggacgctcc acgcctcacc gcagttgtag        120
ggcacagaga caggcctcac caaagacgag gccagctggc tggtcagcat gggaggaggg        180
cgcccaggcc tgggcccgga ggagcagccc tcctcccacg ctgtgggccc tcgctgtgga        240
cccgggatcc tgtccctggt gagctcatgg actccacaag tgacactcca tttcccagat        300
ggaggctgag gctagaagc ttggttcttg ttctcatcca gggcttgagc ccagtgctga        360
gccgagtctg accctctgtc cgtgggtgca ccggctgagt gcagctgtgg ccccaggctc        420
tgccgcagct ccctggagag caagccgcac ccctggttgc tgccccggct cccagcaacc        480
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989

```
ctggagatct cttgttgtca cagccacttg ggccttggac gacccacaaa tgagagctaa      540
gcagttgc                                                              548


<210> 1731
<211> 872
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (694)
<223> n equals a,t,g, or c

<400> 1731
ggcacgaggg gaaaaggtga gaggagaagc aaagaagtgg aacaaagact tccaaattaa       60
agagaccact taagaaaaat tacatcaatg tttatactac ttataatgta cctcatttgg      120
gaaggaaagg ctgttagctg ctacttgtta ccacctatca aagcctctgt ggcaacagta      180
ttgacattta atccttggaa gttctgaagt ttttacaaac ttggtggtga ggttgagttg      240
atttgttttg cctcaataag aaatgttgat atatggtggc tggtaagatg gccgaatacg      300
aacagctccg gtctgcagct ccgagcggga tcaacgcaga aggcgggtga tttctgcatt      360
gggtacccgg ctcatctcac tggaactggt tggacagtga gtgcagccca tgaagggtga      420
gctgaagcaa ggtggggtgt tgcctcaccc gggaagtgca ggggattgga gaactccctc      480
tcctagccaa gggaagccac gagagactgt gctgtgagga atggtgctct ccagcccaga      540
tactacgctt ttcccaccat ctttgcaacc cacagaccag gagattgcct tgggtgccta      600
caccaccagg ccctgggat tcaagcacaa aactgggtgg ccatttgggc agacaccaaa       660
ctagctgcag gagtgtttct tcatactcca gtgncacctg gaactccaac aacacagaac      720
cattcactcc cctggaaagg gggcagaagc cagggagcca agtggtctag cccagcagat      780
cccacccccca cggagcccag caagccaaga tccactggct tgaaattgtc gctgccagca     840
cagcagtctg aggtcaacct gggacactcg ag                                   872


<210> 1732
<211> 1782
<212> DNA
<213> Homo sapiens

<400> 1732
ggcacgagcg gcacgagcac atattgatca taggccatct gtaagcctct tcattatttg       60
atcatcatga atcgtcgagt ctgtgttctc atgctgttgg tggcctggat tggaggcttt      120
cttcactcat tggttcaatt tctctttatt tatcagctcc ctttctgtgg acccaatgtc      180
attgacaact tcctgtgtga tttgtatccc ttattgaaac ttgcttgcac caatacctat      240
gtcactgggc tttctatgat agctaatggt ggagcgattt gtactgtcac cttcttccct      300
ctcctgctttt cctatggggt catattaccc tctcttaaga ctcagagttt ggaagggaaa      360
tgcaaagctt tctacacctg tgcatcccac atcactgtga tcactttatt ctttgtcccc      420
tgcatcttcc tgtttgcaag gcccaactcc accttcccca ttgataaatc catgactgtg      480
gttttaactt gtataactcc aatgctgaaa ccactaatct atgccctgag gaatgcagaa      540
atgaaaagtg ccatgaggaa actttggagt gaaaaagtaa gcttagctgg aaaagggctg      600
tatccctcat gagaatatga ctttcattct ttcacagaag caaggaataa tttcactatc      660
ctatcagatt acatttctgt tatcattcgc ctttagttat ttagcttact tattctgaag      720
caattatata cattaatatt tatgtaagta caatatgtta agcccattac agaccaagat      780
aattgcatag gtttaacagt gtatagtgtt tttttaatca tactgtgtta agattcttta      840
gtagtaacga tatttagttt tatttcaagc tgtttttaat tttaaaaatc atttattttt      900
cttttgtatt tagtttaaat tgacaataat ttagtatatt tatggagtac aatgtgatgt      960
tcctcgtgcc gaattcggca cgagctcaga gccattgggt agcttgcaaa ggcttgcagg     1020
tgccattaaa aggcagagcc aggacgtaaa ctcagagtgg agaggcttat ctctctccac     1080
tccctgatcg tctcatcccc gaaccctaga ctagagggag ctttataggc tgatgcagaa     1140
gttcccaaac ttgtcggcac actgggagca ccaagggagc tcccaagagc actcatgcct     1200
gtatccaacc ctagagatgg tgaattaatg ggtacaggg atgaccttag ctttggaaat      1260
tttcagattc ccaggtgatc ctaatttgag acaagcttgg gaaatactgg taaagtcata     1320
aagaacaagt tctccgaagc ccacagacct aagttcaaat cccagattct acacttccta     1380
gctgtgtgac cttgggcaaa atgcttgatc actctctgcc ttggtttctc catagcatct     1440
actccacagg gatgttgtga agattaaaga ataaattata aagcacttag aagtgtttgc     1500
```

990

```
cattattggt ttcttaaaac agcaataaac caactaacaa aacagggacc cctggcttct    1560
gtgcctgggt gtccaggagg aagaacatgc tgaaaaatac caccaatata gagagaccac    1620
caatcagaac ttgggctggg aggagttaac ggaatcttca gccatcagag ctggaaaggg    1680
gccttagaca gcatctcttt cctcaccagg tgcaggttgt atgggtaata actccaaaga    1740
agctaaatga cttgtccaaa gccacacagc aataatacac tg                       1782


<210> 1733
<211> 702
<212> DNA
<213> Homo sapiens

<400> 1733
ggcacagtca caccgctaaa ttatgaaaga aataattatc aacactttct aattacctaa      60
caaagtaatt tgggattcac cgtggggctg gcgggatggg gaaccaacat ccacttacag     120
ccagggtggt gtacgccaca ccgcgaggga ctggctgtat tggtagtagt ggcgatgggg     180
tgggggctct tgtgcacttt tttgtaccta gcaccccaga agacagaagg agcagcggca     240
gatcttgcct ccactagccc tgccccctag gcctggtggc gcgcgctttg ccactggag     300
gtgaggaaga tcctgggtgg caacgagaga cgtctacaca tagataaggg agcctaccac     360
aggcctgggt ttgctgcggg tttcggtgtc ccccagggac tcctaaactc tggaagtcgc     420
gctagacctc aggaggccgg aaaatgacca cctggcgtcg gtggctccag cagatctgag     480
cccctaggcc ccctgggctc cacgctgagc cgcgctctcg gggcgagtga gcccggggct     540
ctccgcgcat ggggagtgga gaagggaggg ggaggaggag gaaggctggg agggaaagag     600
gatgtgtgtg ttggggggagg gaaggtgcag ccgtctttcc tgggaggaga agcgcgggtt     660
cctggctctc cacgcgcact gctttaatca gacccgtgca gc                       702


<210> 1734
<211> 917
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (610)
<223> n equals a,t,g, or c

<400> 1734
gtctatacag agattatatt ttgtagaagg ataatccatg tctcactgcc ctctcaaatc      60
aactcctcaa gctcttatgc aacacataca cacacacaca tttaccaggt gtgactaaag     120
tagataggtt gatcatttac atgtaaaaat aaacatttag tcacctccca cactaacagg     180
cccatgctga acctttgtat cactttgctc tttttatcag tgaccttgac caatatccac     240
tcaaaccact cctcctactc caactacttg ctgtgatggg agcaacacac acacacac     300
acacacacac acatacacac gcacatacca catacccacc catacaccca cagtcccttg     360
gcagtaaagt aactaggatg acccagaaga cccatccccc cactgagaag tgtagaagcc     420
atgagtttca ccttttttga aacatctgct gatttacatt tgctaagata gttatgtatt     480
agctagccac ctaacagtga aaataatgac atagaaggaa aggggagaat aaggcaactt     540
tattcctttt ccatccagtc cttccttctt cgcctgttgg tagaatgtgt ttgtgtcaat     600
aagtgaaatn aaaacagttg agtacaagcc aggtgcggtg ctcacgcctg ttaatcccag     660
cactttggaa ggccgaggca ggtggatcac ttgaggtcag gtgttcgagg ccagcctggc     720
caacatggtg aaaccctcat ctctactaaa aataccaaaa ttagctgagt gtggtgcatg     780
cacctgtagt cccagatatt aagaggtgag gcaggagaac cgcttgaacc caggaggcag     840
aggttaccgt gagccgagat tgtgccactg catcttgcct gggcaatgga gcaagactcc     900
atctcaaaaa aaaaaaa                                                   917


<210> 1735
<211> 1260
<212> DNA
<213> Homo sapiens

<400> 1735
ggcacgaggg agggcattct cagcacctct gtgaaatgcc cctgaaaatg catccagaag      60
atgcatcccc tactgtttta tttggtgaag ttattccttg aggccagaga taccacctgc     120
```

991

```
attattatgt cctgcccgac gcctggcatc caggaggctc tcaaaatcac ttgcagttga    180
cataggtgaa tatcagcatg tgcgccttgt gttaaatgcg ctggacacaa gaaccagaca    240
gagcagttct atcttaaggg atattcaaga ggtgcctctt acctgtgggg tcagaggaca    300
ggtcttagga ttgtgaggtc aacccttgtc taaggtttca ctgggaaatt agggtcgggt    360
ggacttctcc tgggccctca gtcctcaggg tcaatctcat gagcatcagc tcttctgcct    420
cctccctctt gaaagtgaga gatgagatgg taggggaggc atccatgagc acttggagga    480
gaaacaggta ctggggctcc tgctcacagc atcataggaa ttcctctgta tggcccaggt    540
gcttgggatg tcaattctga cctaagagag tgttccaaac ctttgtgtct caaatgtggt    600
ccaaggaccc atagcatctg catcacgtgg gagctcacta gaaattcaga atctcaggtc    660
tcatgccaaa cccagtgaat cagagtctgt atcttaagat ccccagggga tttgagtgca    720
ccctaaagtt gagaagcact gctcgaaatt gggtcctagt agatatttct cctccatcct    780
accctccata tgtggtcttg ccttatgccc tcaagggccc tggcacctgt tgccctccga    840
caagcctggg gggccgcctt gaaggtacat atctcattga gacaggagtg tgcctcacag    900
aggctcccta gtagtcctca accccttcca tgcctctcct gttagggatc cgctgtgggc    960
tgggcactgt gcaggccctt gcagtgagat gactcagctc caggtcctgc ctgcagggcc   1020
caaccccggc ttggggtcta ctggaagaga caggccacct acctccctga ccactgggtg   1080
atataaaatg tgattagaca agaaccaaga ggccagaagt tctgggaggc acaatgcctt   1140
ttagctggag cagtcaggag agcgtcacag gaggtagcat ctgtgccagg ccctgaagcc   1200
caggtaagac tggttacatg tatgtgggga aggacaaggc aaagcggcag gaaattacat   1260
```

<210> 1736
<211> 859
<212> DNA
<213> Homo sapiens

<400> 1736
```
gattgattag tttaactggc caatacttgt tgagtggctt acaagactat agtagttaaa     60
agcatgagtt ttgttttatc acttaaatcc tggcaaggac ttattaacca ttcgactctg    120
ggcagggtta cttaatatct ctgcctcaca acattttccg tatctctaaa atgggggttgt    180
tcaacaagaa atatactcaa gtttaacatg gcaacaatgt tcaccaaaat cactaccagt    240
atcgtctttg gtctgtctct ggcattgcct atttcaacac gggcatgatc aatgtgcatg    300
atcaatgaca atgtgatagc aagggtctcc atcatatcaa gacattgtta caatgtcagt    360
aatacaaagc agtttggaat ttattgttaa aacataata ttcacttcca aaaacaggta    420
agcaatttag atctaatcta gggtgaaaaa acctacttat gggctttata cattgaagat    480
gcatccctta gttgaatatt atgacagaaa aatgttatca atgctgacat taaaaactgt    540
tattatgtgc caattattag gaaattttaa ataatttaac aggataagat taatagttaa    600
accgaacact aagaaagaga gtattagcta cttgacgaag aacattgtat atttttttgag    660
actatgaatt tttataaaat gtcaaataat acaaagcaaa atactactaa aatgagatat    720
tataattctc atctttatgg aactgcttag tttcatactc ataacatata taaaataata    780
attaagaatt acagaggcca agcatggtgg ctcatgcctt taatcccaag cactctgaga    840
ggctgaggag ggcagattg                                                 859
```

<210> 1737
<211> 1516
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1025)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1144)
<223> n equals a,t,g, or c

<400> 1737
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gaattcggca cgagaaagaa tgaactgttt atgaaagaaa ccttttgaaa gacagaatat     60
ttttgcctgt gggccaaagc tgaggcagga aaacaaaggg ctctttcaaa ggcttagaat    120
atgatggagg atggattctg actttccaac tacaaaaata atgatgcttt tagcatcaat    180
```

992

```
acctgcatta ctccagggag ttgtaaatat actttacaga cacaggctgg gcctttccaa      240
cttttttacct cagtgctctt tgaactcctt aaagggggagt aatgttggcc ccaatttgca      300
cactgagaaa ctgaggcaga agaaatctaa gcaatttgtc ccatgccacc agataactta      360
taagtgaagt caagaataga acaaactgaa actgaatgct tccatgacac aggagcatct      420
gccatctgga atagttcctt cttttttctct agttgatctc tttcttttct gcttttatct      480
ttcattttct gattcattaa ctcttagctc ttgtcaatga attgaggcca gtgtgagtgt      540
tgacatgtcc atcagaaagt ctgtgttggt ccaggtgaca aagaatctac agcttgtatc      600
agccagcctg tgcaggttgt tgcagttcct ttgaacaata ttactagcaa aactcatctt      660
gaaaacaata ttctttcatc ctaacctatt ttgtwcttgc agaaacacta ctgtaaagta      720
cagatgctcc ttgacttaca atacagttat atcctgacga accatcataa gttgaaaata      780
tcctagttag aaatatattt tatgaaccta acctattgaa catcataact tagcctcacc      840
taccttgaat gtgctgagaa catctatatt agcctataat tgaraaaatt aactaacaca      900
aagcctawtt tattatatgg tgttgaatat ttcatgtaat ttattgaata ctgtatagaa      960
agtgaaaaac aaaatagttg catgggtact caaagtatgg ttgctactga atgcgtattg     1020
ctttngcatc gtcatgaagt tgagaaagtc tacgttggaa tctacagctt gtgtaaacca     1080
gcttgtgcag cttgttgctg ttcctttgaa caatargata ttrgcaraac ttatcttgaa     1140
aacnagataa accatcacaa attgggtatt gtgtgtatga aattttacat ttgtacattt     1200
aaaaaatatc cggtgtttgg cttttttaaaa aaataaatgg tacctaaata gttcttaatt     1260
tccccttatg ggtagtctcc tagctgttaa atgtacattt atttactcat tcattttttt     1320
atttgacagc tatttgtttt gaatttactt ttggcacagc actgggcttt gtaatgaata     1380
ctgtacaaca gatcaaaatc ttatagaaga ttttaataaa gattttataa agattttaat     1440
aaagattaag tctttaagat ttaaaaaaat tttaatttct ttttttttttt ttttttttttt     1500
ttttagctag tctcga                                                    1516

<210> 1738
<211> 508
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (255)  ·
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (473)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (502)
<223> n equals a,t,g, or c

<400> 1738
agctggcatg aaatatgttt tctccagttt gctacatagt cctctcttct gatgtttatc       60
ttttttttttt gactaatatt tgtattggta agaggtgctt tggaatttgc acacatgarg      120
aaataaagag cttttttcct ctacatttct aatattcagc tgctctctta cctttcttgt      180
ccaggtattt tgacttttaa attctctagg tggtttctct ttctctttct ctttctttct      240
tcctttcttt ctttncttttc tttctctttc tttcttcttt cttttcttttc tttcctttct      300
ttccctctct ctctctttct ttctttcctt ccttccttct ctctttcttt ctttcttgac      360
caagtctcac tcttttgccc aggctgaagt gcagtagtgt gatctcagct cactgcaacc      420
tccatctcct gggttcaagc gattctcctg cctcaggctc tcgaggggggg ggnccggtac      480
ccaattcgcc cttaataatg antcggaa                                         508

<210> 1739
<211> 311
<212> DNA
<213> Homo sapiens

<400> 1739
```

993

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ggcacgaggg ctcccacagc cctcctgatg aagtcattgc tgctcgccat agccttccag      60
aaacttcttg gctcccccca ccccattctc caacctcacc tctttgcatc cctccatccc     120
tcgcccctca tagtccaggg atcctgaaca cctgtgcttc cccaaacctc tcccgcttcc     180
aggcctctgc acacgcagct ccctctgctt ctccagccct tcagaaatgg gccagtgaca     240
gagctctgtg cttcccacac cgtcgcctct tccggggttc agaggattca aggccccact     300
tcccagtctc c                                                         311


<210> 1740
<211> 1338
<212> DNA
<213> Homo sapiens


<400> 1740
gattcggcac gagctgggtt ccaggttccc agggctggct gtgagctact caagggcagg      60
gctgtatctc gtttcctgcc atgcctttgt gcctagcaca gtgccaagca cacggcaggt     120
atctgaacag tgtgggaaga gaaaaggtgg aggggagatg gttgggggta gactgtgaga     180
gtggaggtgg ctcaacgctc ccacccccaa cctcacacac agcaccctta gcccaggcac     240
tgatcccagg agtctaagaa gctgattaga actgcccatg gctgcagcta acctcggaac     300
tatgccccac cacctgctgt crtctccctg cccccactcc tacttccctc tctcctccct     360
ccccaggggt ccggggcagc ctccccctcc cccaccccat ggtgagaaat cccaaagact     420
cctgggcctt tctctgctgc ccggctttcc cgcctcccct ttttctttct cttccttctg     480
ctttgcctca cattcaatct ctccctcccc cagcctggtg aatccaaact gaaaaaaaaa     540
aaaaaaaaaa aaggcccaca caacagcttc aacagtgaaa aataaccaat ttaaggagta     600
atcgctgctg taatgattgt ctaagccctg agtcactgca gaaaatcgga ctgaagctct     660
gggactccca ggctccctga gagtgtcata tgggttttttg tttttgtttt tttaaatatc     720
caggacctca gtgtctccat ctgtaaaatg gaaggaatat tatcagccca aggaactga     780
ttgttaatct cctgattttc cctggggctg ggaatcagag gttaaggtgg tccacacagt     840
tggcttggga atcaccacgg gacacattct tctaccacag gacccatggg agaaatgtgg     900
tgcctggcag gtgctgagag actcacagct tcgagggtct ctgggaaagg tttctagaga     960
ttgtggtgtt taactgagct gggaaggatg aatgggtgaa tgagagctat gggaagtgat    1020
ggagtgatgg aaagtcagct ctggaagaga ctagacacct catcttgccc tatgctctca    1080
ttttacagat gaagaaactg aggcctgaag ggcttcagga actgctcaaa gtcattagtg    1140
gcagagccca aattagtggc agagcccaca ttagaaaaca ggtgccttga ctcctgctcc    1200
agtgctcttt ctttctttct ttcttttttt agacggaatc ttgctctgct gcccaggctg    1260
gagtgcagtg gcatgatctc agctcactgc agtctctgcc tcmtgggttc aagtgattct    1320
cctgcctcag cctctcga                                                 1338


<210> 1741
<211> 1736
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (369)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (605)
<223> n equals a,t,g, or c


<400> 1741
gaattcggca cgaggaggcc ccacaatgtc ccccaactgc cacttgctgg agaccagacc      60
ctcagcctcc ctgcttctgc tgggcatccc tctgctcagg ggagcatctt gaggctatac     120
aggtctcagg tgcagctggc agcaaagaga cataggagga ggtggttgaa cccaccctgc     180
aatgtccaag gtccaggtta aaccctgaga gtgggtgagt gtgtctggtc ctgtgactca     240
gtttccctac ctgtaaaaca gagcttcaac gagatgaacg atagtcctga gcataacagt     300
ccacaggggc ccacgagccg cttctgcgtc ccaagccctc gtttctgcat ccwgtctyca     360
tctgctcanc tctgaatgaa cccatggtcc cctggaggac takgtgaaga aataccctaa     420
acacctcccc aggcatcgag ctcatgcctc cagcacaagg cctggggctg taacgcaggg     480
```

994

```
agctgggctc cagcttgaat gctgctctty ctttctttct ttttttttaa aaggggtgaa    540
atccacataa cacaaagtga accactttaa agtgaacact ttcatggcgt gtggtacatt    600
cacanattca tggatgctcg tctcctatac ctgagctata tcctgcctgt cacaattcca    660
taggaagtaa aaccagccac tttctgtaaa tgggatctta agcagaactc taacactgtg    720
cacaraaagt gtgactgtgc tgggttcgag gaaracaggg tctggtctgt gtccccagcc    780
gaatctcatg acaaattgta attcccarcg tgaagggarg gamctggtgg gaartgatgg    840
gatcatgggg aargattttc ccctcgctgt tctcatgata gggagtgcgt tctcgtgaga    900
tctggtggtt taaaattgtg tagtgcttcc cctcctttct ctgtctctct cccgctcgac    960
cgtgtgaggg ccttgcccac tcccccttca cctgcgtcat gattgtaagt ttcctgaggc   1020
ctccccagcc acgcytcctg caaagcctgt gaactttgag ccaattaaac ctcttttctt   1080
tataaactac gcagtctcaa ctaaagaaag gcagttcttt atagcaatgt gagaarggac   1140
taatacggag aagggccacc tgtcctttca aaggccccgc ccaggaccct ttgaaaccag   1200
agcgtccagg tgccctctcg gatgtttct catctcggga gtcctgtggt tttaacgttc   1260
ttttacgatc acacctctag agagtgctga ttccctggat accacaggac ctccctgagg   1320
tgtccaggac agagcaagct tagatattag gcagaggttc taggagctgt gcacccctgc   1380
acccctggac cagagagtct gggtgaggaa gtggggggcgg gatgtggggc ctgatctctg   1440
ggctgctgac cacagaaagg gctcacaccg ggaagtggac ttgggcctgt ccagggcagt   1500
tccggggcag aaatgggagc tggagatgtt tgtggctgtt cccgtgagga tgctccagcc   1560
ccaggaggcc gtcggggaga ggccggtgct gtgtggaacc acacatgtgt gagccagtca   1620
ggagactgct gtgtcagtca ggaaaggcca acacagtgca ctgtcctcac actgggagga   1680
ccggcttccc accccactcc agggctttgt ggtaagcctg acgcaccccа ctcgta       1736
```

<210> 1742
<211> 522
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (436)
<223> n equals a,t,g, or c

<400> 1742
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tgtaattgga aatatcaact catgttgaat gtgtttgctg tacctgttta tgttttattg     60
attattttct gggagaggag ggctaaaaaa tacactgcag agaatagaca atttatgcta    120
taaatataat tgcaaatgcc atgaattaaa actgctgctg gatagttcaa aacaatggtg    180
ttttgagaac ctgaccaaag gcagtctttc caagaatcag tcccgtattc atcaagtgca    240
ctcatagaga ggcagggctc cgttcttaat tcctccctaa atatctgatt cagacagaga    300
aaatgtgtct catcttcctt ccccattctc agttcctatc ccttgtcaac gcaaacacaa    360
tttatgcaaa tattctttct ttgtttcttt cttctttctt tctttccttc tttttttttt    420
tttgatggag tctcantctg tcgcccaggc tggagtgcag tggcgcagtc tcggctcact    480
gcaacctcca cctcctgggt tcaacctctc ctgcctcagc ct                      522
```

<210> 1743
<211> 591
<212> DNA
<213> Homo sapiens

<400> 1743
```
ggcacgagaa agaactatta ttactcccgt tttacagatg aagagacaga ggcacagaga     60
ggtcaagcaa gcggcccaag gtcacagggc taagacagaa cagagccaag gtctgaggcc    120
aggcaaccgg actccagcat tctaaacctc catgcagtcc tgcctctctc tcttcagctc    180
atacccaggt aagcaggcca agctcaaaaa tagcagccaa cgccatttc aaactcatgc     240
tttatgaatc ttaaaatact tacttgtttc ctagtttctt acacctttcc atcatctcgg    300
tcagcagagc ctattatgtt aaaaataata ataattaaaa aatcaggttg gaggagctaa    360
agtaacattt ctaagagatt tccaaagtcg aactctaaaa tgaatgtagc cacatgtcca    420
ttaagataat tctcagtgtc tggtagggat ggggaggctt ggggagaaaa aaattcactt    480
tcattgcatt tagtgtaata aatagaagga ggggctgggg tacagtggct cgcacctata    540
attctagcat tttggtagac cgaggcaggt ggatcacttg aggtcaagag c            591
```

<210> 1744

995

<211> 610
<212> DNA
<213> Homo sapiens

<400> 1744
```
ggcacgaggg aggaaagagg gtggaatctg gacagtatga aggatttgta ttgtacctgt      60
aatgtttgat gtctgaagct gggtggtggg catggctgtt tgttattctc catccttttg     120
gtatgcctga tacatttcat aataatttta aaaaggacaa gactactgca gagaaatgca     180
tagagtgagc tctgtttggg tttttaaaat gattcctaca tctatgcttg cagatgtaag     240
caccagccct ggaaaacatt gcaagggatt cttagtaggc ccaagctttg ggaaagggcc     300
aaggggggctg gggagttgat taggaggggga tacatgcttt ttcctgctgc cttttgaatt     360
ttgtaccaca cgtagtatta cttattaatt aaaaaataat ctgaactagc caggcgtggt     420
ggcacatacc tagtctcagt tacttggaag gctgaggcag gaggatcact tgagcccagg     480
tggttgcggc cagcctgggc aacatagtga gaccctgtct ctttagaaaa aacaggccag     540
gcatggtggc tcacacctgt aatcccagca ctttgggagg ctgaggtggg tggatcacct     600
gaggtcggga                                                           610
```

<210> 1745
<211> 695
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (25)
<223> n equals a,t,g, or c

<400> 1745
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tngccgcccg ctctagaact agtgnacccc cgggctgcag gaattcggca cgagcccacc      60
tcagcctccc tagtagttgg gattacaggt gctcaccacc acactcatct aattttttgta     120
tttttagttg gccatgttgg ccaggcttct cttgaactcc tgaccctcaa atgttctgcc     180
caccttggcc tctcaaagtg ctgggattac aggtgtgagc caccgcacca ggcctaaaat     240
taaatggatt ccggttgcag gtctttggct caggctgttt tccctgatgt ttctgcaggt     300
cagttactta tggactgatg tttctgcagg tcagttactt atgtggttgt gcagatggcc     360
aaccacagtg gccggttact tttctcaggg cacctgcctt ctagaaatgt atcctctctc     420
ctctcccttt tcctctttct gtcagagaat agcaggggtt gtggaggaaa gctgaattct     480
aaattagtca tttcgataat taataaggct agctagaggt ttgatgagaa aaaaattgct     540
gcttttttttt gtaagtgtaa tgtggttaga tataaagtat ccaaaattta gacagatctc     600
aaaatccaaa attttatttt tccctcaaag ccatgcttaa gtttactcag aataaccaca     660
gcatttttct gaggctctgc aaataccttc tcgag                                695
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<210> 1746
<211> 568
<212> DNA
<213> Homo sapiens

<400> 1746
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gcacatagtg attttctcct gtgctttgtc tccagggaca ttggctgctg tcttctgacc      60
caccctgtgt ggctttggcg tctcctgtga cctaccagta tgggtcttgg cctcatcctg     120
cctctttgtc tttctggccc accacccaca gcttgaatct caggctccaa cagttgcctg     180
accccccagat tctgatgaca gcctacctac ttgttcttca ggcccttcatc agactcactg     240
cccagacaca ccacacagga gaacatgaaa gggtgaatga atctttcatc atttgatgac     300
caagttggca ttcttttaca ttccagccac cagaggaagg tgtatttttaa cacaattgcc     360
ctcacatcct ccttaacagg atttacataa gtttattaac acatatgttt ctacaaaatc     420
aagttttgag aaccattttt atacactgat ctgggacatt ttggggatat gaaattaact     480
ttagcacaca cagcaagaag aaaaccgaac aacaaattct acaaacacca aatttgctgt     540
```
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996
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```
gaaatttaca tttcagattc tcaagaaa
```

<210> 1747
<211> 468
<212> DNA
<213> Homo sapiens

<400> 1747
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ggcacgagag gccctggggt ggcggggaga ggaacaggga gagcatgaga cagacccaca    60
gggctgaggc caaccctgct tttatttcac aagagcttct cgatggctga caggagctcg   120
ggtttcagga tggagtccgg ctcggccccc gcggccttga tgtcctccag cacagccatg   180
tcccacgaga aggtcaggag ggcagagggc acctgcggta ggggtaggcc gtcactctga   240
gaccgagagt cggcccttgc cgcggcaggg aactcagcgg gcaacctggg cgcggggatg   300
ccccggcctg gaagccatct cagctggtgg aggctgtggc tcgcacccag gcctcctgcc   360
ctgctcctcc gggactccag gacctaagcc taaacctact gcactagtaa cgcacgtcac   420
cgctcccatt tgatggggaa actgaggcgt ggagtagtta tgaacttg                468
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<210> 1748
<211> 1138
<212> DNA
<213> Homo sapiens

<400> 1748
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ggcacgagcg agtattgagt tcattaatgg ttattatcat cgtgtttaat cagtaagtga    60
ttttaacttt cttcattatc ccctcctctt gtgtaactgt ggataagtag ttcccatgga   120
ttgcttcctc tgtcttctta gcgagaaata tcggtggcta tgagatcata gctcaacagc   180
ttcaattctg tgctcttcct ctgagcaatt tttcttcttt tcagactttt tccttttctt   240
ttcccttccc ttttttttcat gttcttcctc tgcaataaga aagaatttag aaaaaggaat   300
gtaaatacac catttggaaa aagtagaaat taacttcggt tataagaaga cttgggtgct   360
cactaatgta acttttcctg ttggctagga aagggattac acctagcgaa aggagacaga   420
gcaaggatga gaggacattt gcccactgag aagagactag tgaacactcg tttcttccta   480
ggtaatgttt tggttcagta tcgcaaaggc taatgacatc ttttgtaagg tgtgaactgc   540
ctctgaacta agaggcatta agatgatgag cagaaagagc actaagattg atgttaaaat   600
taatggcacg tgagaaacat gtcacatata aagacagaga aagctgtaga gggctgggtg   660
ctcaagacaa cttgtgatag attttgggag gccactgtcc acagactggg atccataagc   720
cttaggggca ttgtcacttg gtctggtaac ccatctcagt ctgttctggg gtccctggac   780
ctactgtgtg agatatcaac ataccatttc ttaggcacta gttaatattt cctgaaataa   840
atatgttaaa cagtccaggt gcaatggatc atgcctgtaa ttccagcact ttgggaggct   900
gaggtgggca gattacttga acccaggagt tcaaaaccag cccggccaac agggcgaaat   960
cccatctcta ctaaaaatta aaaaattagt caggcatggt ggcgcgtctg taataccagc  1020
tactcagggg gctgaggcag gataattgct tgaaactggg aggtggagat tgcagagagc  1080
tgagatagca ccactgtact ccagcctcga caaagagaga ctttgtcaaa aaaaaaaa    1138
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<210> 1749
<211> 898
<212> DNA
<213> Homo sapiens

<400> 1749
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ggcacgagtt gccctttaga cttcctggcc tgatggactg ttccaagatg cagtcattct    60
cctatggtct ttctggagat gtcttctcta gactgagcag ccaatgtgtt gctatgaagc   120
tctggctagc tgggtaatgc acttccttgt atttgctctt cctcgttcct tgtctcatgt   180
ctccttttcc ctgggattct accctacact gaagtaatag cacacaaatt tttgtctcaa   240
gttctgttgt ctaggaagc caggctaaga catggttcaa tgggtgtcct tagaaagcag   300
acctccaaaa gagaactttg ggtctccacc gatggtggca aactgggtgg cccggattcc   360
tggcatgcag tgatagtaca attgccaata tgttatgtgg tataggcaga aggcaaggta   420
ttggcatatc aagtggctgt gtacttgatc agtacagagg aacgataat cataaggatt   480
gtgttacatg gtggctgcct ttgatggctt ggaagatttg caaaaaggca taacagactc   540
aggaaagcta attgcccact taaaatatgc tgtgaaagtc agagggcctc tatggtagcc   600
ttccaaatcc tcttatctac tgcagctgca gggcaaatga tggaggaaga aaatcatgtt   660
cagggtttca tggtataggg ttgcaaacct acaaggagaaa aaaaattcac agccttaaaa   720
```

```
tgtctcctgt gtcaatgtga aggctttgat agggaaagag taggaacctg aaacctgcaa       780
ggtggacatt tgagtggaca aatctaataa tctgaatgtc caaatttccc tgcctctctg       840
gagattatgc agtctcctca gttggagact atgcagtata tcactcgatg tactataa         898
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<210> 1750
<211> 764
<212> DNA
<213> Homo sapiens

<400> 1750
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ggcacgaggt cctaaggtga gaaggagggc cactagcata aaaacaactt gaacagaact        60
tgcttcacaa gccaataaat tctaataaca aaaggcaaag gaaaaagttc cctatagaag       120
ctaaggattt tccaaagcct aatgctcatt ttttatatcc ttctttgtat ggtcaaaggt       180
tgattcttcc tttaccagac acaaaaaagg gcttaattaa aaatttgaaa tcaaatttta       240
gagatataaa ctataaataa atacatttgc ctttcaaatt tttagaacat tatcctagtt       300
aattcaaatt tttttatttg agatgaaagg cgatttaagc taattttcat tggatcattt       360
attattatta ttattttgca gtgtattagt taactactgt tatataacaa attaccccaa       420
aacttaatgg ctcacagcat caaaaatata ttagctcata gtttttgtgg gttaggaatc       480
tgggtgctgt atgtctagtg ctcagggtcc ttcacaagat tgccatcaag ttgtcgactg       540
gggatgtagt catctgaagg ctcacgtgag tgagtatcaa attccaagct cactcacttt       600
gttcaagttt ttgacatctg ctggctggag accacttgtt tgccttgtgg gcctctccac       660
agagtagttt acaacatggc aacagcctct ctagttagta tgagcaagcc ccagaagcat       720
atttgccata ttctaattat tagatacaaa tcaataggct cgag                       764
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<210> 1751
<211> 417
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (386)
<223> n equals a,t,g, or c

<400> 1751
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ggcacgaggg aaacttaccc aggtttctat aaactagact gcaatctgca ccagtatcta        60
ccagcgctag gacctgctgt acattagtgg ggaaccagtg gattgccaac tccgcatgtg       120
gcctccctcc actcccacct ccttcacccc ctgctgcccc aagttgggca cctcggccat       180
ttccctaatc aaacaagaaa ggctccatat ctccacccaa ctgcaaatag tccttgagct       240
ccagcgcctg ggcaggatta gattgaacaa cactgttttg cccctcttg gtcattttcc        300
agaatttttg ctctggggac aattgactcc acagagccaa gggcattcca ttgggttgcc       360
tgtyaatttc tctcgagggg gggccngtaa ccaattggcc tatagtgaat cgtatta         417
```

<210> 1752
<211> 817
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (600)
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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (683)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (685)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (728)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (811)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (814)
<223> n equals a,t,g, or c

<400> 1752
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actagtggat cccccgggct gcaggaattc ggcacgagct cgtgccgaat tcggcacgag      120
aaattcatgg gagtgggatt attaaataga ataatatgaa caattgtatg gcttatgttt      180
gccttattgt attcccaaag agctgtaaca ttttatagca tcaccacttg ggcaggggta      240
ttacctgttg ttgctaattt agtaagtaga agagagagat caaagtttct ctaatttgtg      300
tttgtgtaat ttatctgtat actttcttca tttatataaa taaatgtctt cactttggga      360
ggctgaggcg ggcagatcac ctgaggtcag gagttcgaga caagcctggc caacatggta      420
aaaccccgtc cctactaaaa atacaaaaat tagttggatg tggtggctca catctgtagt      480
cccagctact agggaggctg aggcactaga atcacttgaa cccgggaggc ggaggttgcg      540
gtgagctgag ttcacagcct gggcgacaag agttaaactc catctcaaaa aaaaaaaaan      600
aaaaaaactc gagggggggc ccggtaccca attcgcccta tagtgagtcg tattacaatt      660
cactggccgc gttttacaac gtngngactg ggaaaaccct ggcgtaccca acttaatcgc      720
cttgcagnac atcccctttc gccagctggc gtaatagcga aaaggcccgg accgatcggc      780
ctttccaaca gtgccaacct gaatggcgaa nggnaaa                                817

<210> 1753
<211> 1653
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1111)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1613)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1625)

&lt;220&gt;
&lt;221&gt; SITE
&lt;222&gt; (1631)
&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;
&lt;221&gt; SITE
&lt;222&gt; (1637)
&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;
&lt;221&gt; SITE
&lt;222&gt; (1651)
&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 1753

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gcaaccttgc agagtcagaa tcctgatcag cagttttgac cagcacatca agagtggctt    60
tacctcccag gcattgatcc agcattagtc aagctacaag acactgatgt agaaaaccat   120
aatgtcagtt tactaatgta gaataagaaa taaaatctca gaagacctga gctctcctgt   180
cagcatgact tgcacttgta ctttcctt tgtagagaa gctaaattat aatcagaaag      240
ttgttttggt gagcttggaa tcagaaaata ggagtttaag tcatctgttc aacatgcagc   300
tttcctcagc tgtgatagct ttttcctgct gtccagtctt catgtggagc ctggtcaata   360
gcaccagaat tctaagtctg ctggccaagg tgctgcctyc tgcagagaga gaaagcccat   420
caaagttgac ttcagtgact cccccttcac tcacccctca tcttycacgg gcaaccaact   480
ycctttttga ttgacacatc atttctttac atacattaat gccttccata ttaccacaga   540
gagtttggta gactggaaat cattttattt ctttgatcta cttcatcttt ctctgcattg   600
agcctttgcg tactaattta tagctatttt ctcacaggat agtctatttc cattatatct   660
atattttcta gtggtccttt gcgtttgcct cttttccaga ctgtataggg catggtgcca   720
ggcacagttt atttgtttta ttctatatgc tgatagtatc atcttttcca tctttagatg   780
ttttatctca ttcagagtga gaggggcact tggtcagtcc tttttgcatc tcaatagttg   840
atcctctttt gattaaaaaa tatttaattt ctaataatgt gtgttagagt gaaaataaca   900
ggaattatta ggcccagtca agactaacag ttcttgactc atagttccaa atcacagttc   960
caagatttcc ttaacctttc tgatcctcac ttccctccca aaaaagtaag aatggctata  1020
attacctacc tcatggaaat tataaggctt cagcaagatt aaatgtactc atttatttaa  1080
catgcatagt aagaactata aatgttaatt nattcttact tacattarga tactgactta  1140
tgaaacagag attaaacaca ttctgcaaaa ggactggtat tgacaggctt tgattctaat  1200
agctcaaaag ataggccatg gcttgctaga gaaaatgaaa ggatactcaa ggctcattag  1260
attaaaaggc tgctaatgtt ctctaagctg taagtagatt tttgcccaca tttatgaagg  1320
ttgatttcta atcagattag aaatggcata ggctggtggc gtcatctcag agctgccaca  1380
gcattctcag gagactcagc catatcatgt tgggttgctc taagaacaca cagagacctt  1440
tatgcttttt cacaaaagca tactctttcc ctggagtgtg taactctatg tgttgacctt  1500
tagtgggata agttcttaca atggagctat tctgggtaca aaacatcact actctgtgag  1560
attttggaag ataacactgt ttgctgattt tacaagcccg ctcggggggg ggnccggaac  1620
ccggngcggt ncccgtncct ttcccccccc ncg                               1653
```

<210> 1754
<211> 713
<212> DNA
<213> Homo sapiens

<400> 1754

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tgcaggaatt cggcacgagg agactcttaa cccccgcaaa attatccagg ttaaaaacat    60
acgtgagctt cagaaagggt gaacatagcc atggctgaga atcgttgtgg attatcatga   120
taggaaattg acatgcttat gggtgttctg tcctttgggg ttgatgtcag ggagccaagt   180
ggttgcacta tttctgctgt gtgtccgaat ttctaaagta atatccgtgt attgtttgga   240
gagcggactt ttttgcttta ctcctacttt tacagaaaag aattttttt ctcaagcaac     300
aaaacatttg gtctctggtg tcaaagagga ctttattata ttagaattat aaagctttag   360
ttaggaataa gtgttggaca ttattaaatc aatttactgc aggctgggca tggtggctca   420
cgcctgtaat cccagcccctt tgggaggcca agactagtag tctccaattc cattccatca   480
```